# QuickStart 8

**Teacher's Resource Book** 



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## Knowing MS Access 2007



In this chapter, you will learn about Databasement system and MS Access. In this you will learn about different components of MS-Access.

## Teaching Objectives:

Students will learn about:

- Database
- Tables, Reports, Forms, Queries
- Various datatypes available in access
- Creating tables



## **Teaching Tips:**

While teaching this chapter, tell yours students about DBMS, its use and advantages of using DBMS. Give the some more example of DBMS. Explain briefly about MS-Access. How to use Access. Explain them about Tables, Reports, Forms, Queries and how these tool are helpful for them in daily work.

- Ask the students some oral questions like:
- What are database and tables?
- How to create tables?
- What are data types and how many data types are there?



## **Evaluation:**

After explaining the chapter, give them a task to create a database named school. Tell them to create different tables in that database like, fees, library, exam etc. and fill data accordingly.

Nai	ne:_		Class	<b>:</b>	Date	<b>:</b>
A.	Re	ad the clue and a	nsw	er the followir	ng:	
	1.	It is a database m	anag	ement tool		
	2.	It is used to stor	e da	ta in a structur	ed and o	rganised format
	3.	Data entered in a	singl	e row of table is	called _	
4. In Access, the information can be seen in ta			tables through			
	5.	The data types		to store only	logical va	alue 'Yes/No' is
B.	Ex	plain the followin	g tei	m:		
	1.	Record	2.	Database	3.	Table
	4.	Report	5.	Forms		
C.	Ex	Explain any 5 datatypes available in Access.				
D.	D. Write the steps for the following:					
1. To create and save a table.						
	2.	2. To view and adding data to a table.				
	3.	Modify and deletir	ng a r	ecord.		

- A. 1. (a) Database software
- 2. (a) Table

3. (c) Record

4. (c) fields

- 5. (d) All of them
- B. 1. False

- 2. False
- 3. True

4. True

- 5. True
- C. 1. A database is defined as organised collection of Records. The database is divided into rows ans columns. e. g. - MS-Access, Sybase.
  - 2. The components of Ms-Access are
    - Forms Forms are the convenient interface, use to add, modify or search the information in the database table/ queries.
    - b) Table Table is the collection of related (Records) information. Raw data in a data base is stored in form of logically related tables. A database contain two or more co-related tables.
    - c) Queries Queries represent the information from the table that satisfy certain conditions. The queries are a kind of Questions we ask to the computer.
    - d) Report They are the systematic representation of information stored in table of queries. They are use to present data in specific manner for better analysis.
  - a) Report They are the systematic representation of information stored in table of queries. They are use to present data in specific manner for better analysis.
    - Field A field in MS-access is a piece of information related to a single person or thing. It is the heading given to a single columns.
    - c) Record A record applies to the information to be entered into the table with in a database. It is formed by collection of two more fields arranged in a Row.
    - d) Form Form are the convenient interface, use to add, modify or search the information in the database table/queries.
  - 4. A table in Design view is divided in two sections. One in the upper area another in bottom area. The top area is made of

column and row. The lower portion of the windows is made up of two section. The left section is made up of two tabs labeled general and lookup. Each label contain two column and various rows.

- 5. Different data types Available in Access are:
  - a) Text It is used for text and allow to enter number, alphabet and all other character. It can store up to 255 character.
  - b) Number It contain numeric data. It is used for numbers only no other character is allowed.
  - c) Date/Time It is used for date/time. The number of character is fixed to 8 character.
  - d) Memo Long text with all kind of data. It is used to store long data up to 10 lines. It can store up to 64,000 character.

## **Answers of Worksheet - 1**

- A. 1. MS-Access. 2. Table 3. Record.
  - 4. Forms and Report 5. Yes/No (Logical)
- **B.** 1. Record The data entered in a single row in a table or we can say the collection of data is called record.
  - Database A database is defined as the organised collection of related records. There may many tables in a single database file.
  - Table

     The table are used to store data in a structured and organised formate. The collection of records is called a table. It is arranged in rows as columns.
  - Reports The reports are summarised form of data. This tool is use when one want to analyse the data or present data to others.
  - 5. Forms The forms are used to enter, edit and display data. They are the interface between database and the user.
- Text

   This data type is use to store text and for numbers that are not used in mathematical calculations. It can store upto 255 characters.
  - 2. Memo Long text with all kind of data. It is use for long pieces of text such as notes and long descriptions.



- 3. Number It is use to store number you want to use in calculations. It contain numeric data.
- 4. Date and time This data type is use to store dates and time.
- Currency It contain symbols for currencies, decimals and coma.
- **D.** 1. i. Click on Home tab, click on view command in view group. Choose the design view.
  - A save dialog box appear, Enter the table name, click the Ok.
  - iii. The save table will get opened in design view.
  - Fill the fields like field name, data type for each column/field in the table.

Student-ID Number
First name Text
Last name Text
City Text
State Text

## 2. Viewing Data

Save the structure

- i. To view the data, double click on the name of table.
- ii. In this view of student table, the field appear across the top of the window and rows or record appear below.

## Adding Data

- i. To add data to the table, simply type the values for each of the field. Use arrow or tab key to move to next field.
- ii. Click on file save to save the table.
- Modify Record To modify the existing data, simply navigate to the record to be modify. Use arrow key, or delete or backspace key to modify.
  - Deleting record go to that record and press delete button from the key board or select delete record option.



## Creating Tables in MS Access



In this chapter, you will know about Database, Tables, creating relationship between two or more tables, filtering and sorting of data.

#### Teaching Objectives:

Student get knowledge about:

- Creating Table
- Customizing the table in Design view
- Sorting Record
- Filtering Records
- Relationship between tables



## **Teaching Tips:**

While teaching this chapter, tell yours students about the importance of sorting and filtering. Tell them about the primary key and its advantages. Explain your students about the relationship and how to create the relationship between two or more tables.

## Ask the students some oral questions like:

- What is primary key?
- What is foreign key?
- What is sorting and filtering?



#### **Evaluation:**

After explaining the chapter, let the students do course book and the exercise given in the chapter. After solving the course book let them do the questions and exercise given by the teacher.



Name:		Class:		Date:		
A.	Ex	plain the following terr	n:			
	1.	Sorting	2.	Filtering		
	3.	Relationship and its type	es 4.	Primary ke	ey .	
	5.	Filter by field				
B.	Fill	in the blanks using th	e hint given i	n the clue	box:	
	(Pr	imary, One to many, Que	ry, Sorted, Rela	ationship)		
	1.	can	extract informa	tion from the	table based	
		on criteria.				
	2.	Query on two or more	tables can be	generated	if they have	
	3.	Records can be display	and in		order in the	
	٥.	query result.	eu III		order in the	
	4.	In relation more table.	ship data can	be extracted	d from two or	
	5.	For creating Relationship key.	among two or r	nore table th	ey must have	
C.	Ma	tch the following:				
		Α		В		
	1.	Query	each field app	ear on a se <sub>l</sub>	parate line	
	2.	Form	each record a	opear on a s	separate line	
	3.	Tabular	customised fo	rm		
	4.	Columnar	moving from c	ne record to	another	
	5.	Navigation bar	retrieving data	based on c	riteria	
D.	Wr	ite the steps to create	relationship	between t	wo or more	

- A. 1. d. All of the above 2. a. Primary key
  - 3. b. Relationship 4. a. Filtering
  - 5. c. A to Z
- B. 1. Filter 2. Primary key 3. Foreign key
  - 4. Sorting 5. Filtering.
- **C.** 1. The tables can be created using the following ways.
  - i. Design view ii. Through wizard iii. Entering data.
  - 2. The primary key is a key which is use to identity each key uniquely. It helps to speed up queries and other operations.
  - 3. Foreign key The foreign key is the primary key of another table on which Relation is to be set. The value in a foreign key field match values in the primary key, indicating that two record are related.
  - 4. Sorting The sorting is the way to arrange the data in an orderly manner, either in ascending or descending order.
    - Steps Open the table with all the records -> Right click on the field you wish to sort. A menu appears, select the option A to Z, Z to A, for text field and largest to smallest or smallest to largest for numeric data.
  - 5. Filtering It is a useful tool to see only a specific record that match the criteria given in form of query.

## **Answers of Worksheet - 1**

- **A.** 1. Sorting Sorting is the tool to arrange the data either in ascending or descending order on a particular field.
  - 2. Filtering The filtering is use to see only such data which match the criteria given by user.
  - 3. A relationship in access is to connect two or more table and fetch data from them. A relationship works by matching data in key column, usually column having same name in both the table.
    - The relationship are of several types: i) One to one
    - ii) One to many
- iii) Many to many.



- 4. Primary key The primary key field in a table stores unique information for all the records. It help to identify each record uniquely in a table.
- 5. Filter by field This is use to list all the values that have been entered in a specified field, so that you can choose which value or values you want access to find.
- B. 1. Query

- 2. Relationship
- 3. Sorted

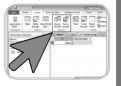
- 4. One to many
- 5. Primary.
- C. 1. Retrieving data based on query.
  - 2. Customised form
  - 3. Each Record appear on a separate line.
  - 4. Each field appear on a separate line.
  - 5. Moving from one record to another.
- D. 1. Click the relationship command in the show/Hide group on the Database tool in the ribbon.
  - 2. Show table dialog box appear. Select each table name, click add. When you are done, close the show table box.
  - 3. A relationship map that contain all the tables that are selected.
  - 4. Relating tables i) Using the edit relationship command.
    - ii) Using drag and drop method-

Select a field name from one table by holding down the left mouse button.

- \* Drag the field from one table to another.
- \* Drop the first field name, one to the another you want to relate.
- \* From the window, select the relationship type.
- \* Select Enforce Referential integrity option.
- Click on Create



## MS-Access: Queries, Forms and Reports



In this chapter you will learn about MS-Access advance tools like Forms, Reports, Queries etc.

## Teaching Objectives:

After completion of this chapter students will learn about:

- Query
- Creating a query in design view
- Using query wizard
- Forms
- Reports
- Creating Reports using report wizard.



## **Teaching Tips:**

Tell the students that MS-access is provided with very useful tools like Query by using which you can ask any question from the computer. By using Forms you can add, modify or delete record and by using Reports you can summarising the data.

## ASK the students some questions like:

- What are the advantages of summarising data?
- What are the advantages of using Query and Forms?



#### **Evaluation:**

After explaining the chapter, let the students do course book and the exercise given at the end of this chapter. Give them some assignments and project based on the topic given in the chapter.



Name:_		Class: Date:					
A. Fill		in the blanks:					
	1.	It is a request for obtaining desired result from the database					
	2.	It resemble an input sheet to be completed by the user					
	3.	The form in which same data is displayed in two view simultaneously is					
	4.	This tool is use to summarising the large data					
	5.	In report it appear at the top of the first page					
В.	An	swer the following Questions:					
	1.	What is criteria in Query?					
	2.	Explain different types of Queries.					
	3.	What are the advantages of using Form?					
	Write the steps to create Query in design view?						
5. What is difference between Form and table?							
C.	Fill	in the blanks using hint given in the clue box.					
	(bo	ttom, Columnar, Related, Queries, Form wizard)					
	1.	form display one record at a time.					
	2.	Navigation button appear at the of the form.					
	3.	$\underline{}$ can extract the information from the table on a specified criteria.					
	4.	Query on two or more field can be generated if they have field.					
	5.	Using option to create a form you can add the required field to the form.					

- A. 1. Objects (c)
- 2. Queries (c)
- 3. Reports (a)
- 4. As a source of records for forms and report (b)
- 5. It is an input screen designed to make the viewing and entering data easier (b).
- B. 1. False

- 2. False
- 3. False

- 4. False
- C. 1. Select Query
- 2. Parameterised query
- 3. Split form
- 4. Split form
- 5. Report
- **D.** 1. Query- A query is a request for obtaining desired result from the database. The query can be used to answer a simple question.

The different types of queries are:

- i) Simple query
- ii) Action query They are of following type:
  - (a) Append query
- (b) Delete query
- (c) Make table query
- (d) Update query

- iii) Aggregate query
- 2. The form is a simple way to enter data into the database. A form resemble an input sheet to be completed by the user.
- 3. Split form A split form is a form in which the same data is displayed in two view simultaneously. One part of the form display in the form view (stacked field), while the other part displays in the datasheet view.
- 4. Reports This component of access is use to summarise or organise data for viewing online or for printing. It is divided into many sections. They are:
  - i) Report header it appear on the top of first page and display the report title.
  - ii) Page header it appear on the top of every page and display the heading for each column.
  - iii) Page footer it appear on the bottom of every page and display the page number and total no of pages.
  - iv) Detail section it appear between page header and page footer and displays the record from table or query.

v) Report footer - this section is optional, it appear on the last page of the report and display summary information such as grand total.

## **Answers of Worksheet - 1**

- A. 1. Query 2. Form 3. Split form
  - 4. Report 5. Report header
- **B.** 1. Criteria is the condition according to which the data is to be extracted from the database.
  - Query are the database object which extract data from one or more table based on a specified criteria. The different types of Queries are:
    - Select query The select query is simplest query. It can be used to select and display data from either one table or more
    - ii) Action query When we run the action query, the database under go a specific action depending upon what was specified in query itself. The action include creating a new table, deleting record or updating records.
    - iii) Parameterised Query A parameterised query work with other type of query to get whatever results you sought. This type of query required a parameter to be passed to different Query.
  - The forms are the database object that user can create a user interface for a database application. This can be used to enter record, edit record or delete record form same window.
  - 4. The steps to create in design view are:
    - Activate the create table, click the query design button in other group. The show table dialog box appear.
    - ii) Activate the table tab, If query is based on table, Activate query tab. If query is based on query.
    - Click to choose the query/table which you want to base your query.
    - iv) Click Add.
    - Click next table or query on which you want to base your query.
    - vi) Add field to the query from the field list.
    - vii) Locate result group of Design ribbon.



- viii) The result of your query will appear in the datasheet view.
- ix) Save the query with appropriate game.
- 5. Tables It is a collection of related information. Row data in a database is stored in form of logically related tables.

Forms - Form is a convenient interface used to add, modify or search information in the database table.

- C. 1. Columnar
- 2. Bottom
- 3. Queries.

4. Related

Form wizard.



## HTML: Lists and Images



In this chapter, students will be able to know about List and its types, How to set image and Resize image.

## Teaching Objectives:

Student will be able to know about:

- List in HTML
- Ordered and unordered list
- HTML code to create Lists
- Image and pictures
- Height and width attributes



## **Teaching Tips:**

While teaching this chapter, tell the student about list, ordered list and unordered list. Also tell them about attributes of OL and UL tag. Explain them about the image, how to set image on the web page and to resize the picture using height and width of the image.

## Ask the student some questions:

- What is the use of OL and UI tag?
- What are the attributes of OL and UL tag?
- How to set picture on the web page and how to set image in the background?



#### **Evaluation:**

After the chapter is over, let the students do the question given in the course book. Give them some more question to solve.

Na	me:	: Class:	Date:			
A.	Fill	Il in the blanks:				
	1.	HTML offer two type of list in and	the web document they are			
	2.	tag is use to specific of list.	fy individual item in both type			
	3.	and are the a	attributes that are used in the			
	4.	Ordered list is other known as	list.			
	5.	attribute is use with OI of the list.	to select the starting number			
B.	Answer the following as True or False:					
	1.	Ordered number can be represen	ted with Arabic number only.			
	2.	Unordered list are use to represent the list item in a specific order.				
	3.	Image in a web page cannot be re	esize.			
	4.	Type attribute can be use to c unordered list.	hange colour of ordered or			
	5.	Image tag is use to set backgrour	id image.			
C.	Wr	rite the full form of the following	:			
	1.	.gif 4	. HTML			
	2.	.jpeg	. DL			
	3.	.bmp 6	png			
D.	Wr	rite the use of the following:				
	1.	DL 2. Alt	3. Background			

- Start and type (b) Α. 1
  - 2. All of them (d)
- 3. DL (b)
- 4. <Img src = "URL"> (a) 5. All of them (d)
- B. 1 <OL> ordered list - This option is used to create an ordered list in html
  - 2. <UL> unordered list - This options is used to create an unordered
  - <LI> List item This option is use to write List item name. It is 3. used along with OL and UL tag.
- C. 1. <OL> - This tag is use to create an ordered list. i.e. list arrange in an order followed by number or alphabet in sequence.
  - <UL> this tag is use to create an unordered list than is unarranged list without any sequence.
  - The img src tag is use to insert an image into the web page 2. which is viewed by the web browser. The syntax of using < Img src> tag is as follows.
    - <Img src=c:/directerm/image ham>
  - 3. The two attribute of OL tag are:
    - Start attribute The start attribute allow you to further customise an HTML ordered list by setting a new starting digit for the ordered list element.
    - Type This attribute is used to specify the kind of markets to use in the list.

## **Answers of Worksheet**

- **A.** 1. Ordered unordered
- 2. <LI>
- 3. Height and width

- 4. Numbered
- Start 5.

1. False B.

- 2 False
- 3. False

4 False

- 5 False
- Graphics interchange format C. 1. .qif -
  - .ipeq -Joint photographic expert group
  - .bmp -Bitmap

HTML - Hypertext Markup language

DL - Definition term List

.png - portable Network graphic

- **D.** 1. DL stand for Definition list, a List where the items are individual term paired with their definition and each definition is indented and place one line below the term.
  - 2. ALT The alt attribute specify alternate text to be displayed by any reason, the browser cannot find the image or if user has image files disabled in their web browser settings.
  - 3. Background This option is use to set any picture in the background of the web page.



## HTML: Tables and Forms



In this chapter the students will be able to know some more and advance commands of HTML i.e. about table.

- Teaching Objectives:
- Tables in HTML
- Table border
- Cell padding and cell spacing
- BG colour attribute
- HTML forms



## **Teaching Tips:**

While teaching this chapter, tell the students that tables are one of the important component, if you want to show any data in a presentable manner arranged in rows and columns. To make the table more attractive, use border options to display border of different thickness and colour. Background colours also can be added to the table. You can also increase or decrease the width and height of the column according to the requirement.

- Ask the question based on the topic like:
- What is the use of displaying data with border around it?
- What is a form and what is its use?
- What is the use of check box and radio button?



#### **Evaluation:**

After explaining the chapter, let the students do the exercise given at the end of the chapter. Give some more question based on the topic and tell them to solve. After this give them some assignment based on table and related topic.

Na	me:		c	lass:		Da	te:			
Α.	Tic	k the correc	t answ	er:						
	1.	A Table can	be crea	ated using						
		i) <td></td> <td></td> <td>i</td> <td>i)</td> <td><tr></tr></td> <td></td> <td></td>			i	i)	<tr></tr>			
		iii) <table></table>		i	v)	<colsp:< td=""><td>an&gt;</td><td></td></colsp:<>	an>			
	2.	Which of the		wing command	l is	use to	increase sp	ace of		
		i) Colspar	1	i	i)	Row sp	an			
		iii) Cell spa	cing	i	v)	Cell pa	dding			
	3.	The cell in a	a table a	are created usi	ng _		tag.			
		i) <td></td> <td></td> <td>i</td> <td>i)</td> <td><th></th></td> <td></td> <td></td>			i	i)	<th></th>			
		iii) <tr></tr>		i	v)	<table:< td=""><td>&gt;</td><td></td></table:<>	>			
		4	€	element is use	to c	reate he	ading in a t	able.		
		i) <td></td> <td></td> <td>i</td> <td>i)</td> <td><th></th></td> <td></td> <td></td>			i	i)	<th></th>			
		iii) <tr></tr>		i	v)	none o	f these			
		5. To merg be use.	je two (	or more colum	n _		comma	nd can		
		i) Cell pad	lding	i	i)	colspar	า			
		iii) Row spa	an			iv) <td< td=""><td>)&gt;</td><td></td></td<>	)>			
В.	Ma	tch the follo	wing:							
		Α			I	В				
	1.	<table></table>		It is us	e to	o merge	two cell or i	more		
	2.	<td></td> <td></td> <td>To ins</td> <td>ert</td> <td>a blank ı</td> <td>row</td> <td></td>			To ins	ert	a blank ı	row		
	3.	<tr></tr>		To def	ine	data in a	a table			
	4.	Colspan		It is us	e to	o merge	two or more	e row		
	5.	Row span		To cre	ate	new tab	le			
C.	Wr	ite the use o	f the fo	ollowing comr	nar	nd:				
	1.	<th></th>		2.	<table borde<="" td=""><td>er&gt;</td><td>3.</td><td>Row span</td><td></td></table>	er>	3.	Row span		
	4.	Colspan	5.	Cell padding		6.	Cell spacir	ng		
D.	An	swer the fol					-			
	1.	Write the us	e of Ra	idio button and	ch	eck box.				
	2.	What is the	use of	text field and p	ass	word in	a form?			

- **A.** 1. All of them (d)
- 2. Colspan (d)
- 3. <Caption> (b)

- 4. #000000 (a)
- 5. Colour (c)
- **B.** 1. <TH> Table Heading This command is use to define table heading in HTML.
  - 2. <TD> Table data This tag is use to define data which is to be display in the table.
  - 3. <TR> Table Row This tag is use to define blank row in the table.
- **C.** 1. <Table> The table is the way to write the data in form of row and column. To create table <TABLE> tag is used.
  - <TR> By using <TR> tag a blank row will be define in a table, so that data can be written in that row.
    - <TD> This <TD> tag is use to define or write data in the row.
  - 3. Forms The form on a web page allow a user to enter data. It act as user interface which include different type of input element like text field, check box, radio button etc.

## **Answers of the Worksheet**

- A. 1. <Table>
- 2. Cell spacing
- 3. <TD>

- 4. <TH>
- 5. Colspan
- **B.** 1. <Table> To create new table
  - 2. <TD> To define data in a table
  - 3. <TR> To define blank row
  - 4. Colspan To merge two or more column
  - 5. Row span To merge two or more row
- **C.** 1. <TH> This element is use to define heading in a table.
  - 2. <Table border> This attribute is use to specify a border around the table cell. The value "1" indicate border should be displayed.
  - 3. Row span This attribute is use to merge two or more row.
  - 4. Colspan This attribute is used to merge two or more column into one.
  - 5. Cell padding This attribute is used to determine the space between a table cell border and the data within it.

- 6. Cell spacing This attribute is used to determine the space between each cell of the table.
- **D.** 1. Radio button It let the user to select only one of a limited number of choice.
  - Check box It let the user to select zero or more options of a limited number of choice.
  - 2. Text field It is use to take one line input from the user. It can take input upto 255 character from the user.
    - Password field It is use to take password as input i.e. also in an encrypted form.



## Knowing Visual Basic 2008



In this chapter, the students will come to know about Visual Basic 2008. Its components and various tools and controls that help the programmers to develop GUI Applications.

- Teaching Objectives:
- Introduction to visual basic (IDE)
- Creating VB Calculator
- Working with control
- Commonly used controls



## **Teaching Tips:**

While teaching this chapter, tell the student that visual basic is GUI based and specially developed for windows. It provides many advance tools that helps the developer to develop any kind of applications. The VB also provide very useful tool called Report, by using which we can see the summary of any data.

- Ask your students questions like:
- What is object oriented programming?
- What are IDE tool?
- What are the use of Label tool, Text box tool, Radio button?



## **Evaluation:**

Let the student do the question and answer given at the end of the chapter. Then give theme some more questions to solve and also give them assignment based on the topic given in the chapter.

Name:\_\_\_\_\_ Class: \_\_\_\_ Date:\_\_\_\_

A. Answer the following as True or False:						
	1.	Max length property of the text box tool set the maximum number of character that can be entered in it.				
	2.	You cannot make any changes in the form during Run made.				
	3.	Visual basic can Run only in windows environment.				
	4.	A new form is alway opened in the design mode.				
	5.	Text property of button tool set the caption on the button added on form.				
	6.	Label tool is use to display an uneditable text.				
	7.	Each control in visual basic have common properties which can be safe by the user.				
B.	Fill	in the blanks using hint given in the clue box:				
	(Debug, event, VB, IDE, Text, multi live)					
	1.	The mode allow to edit the code during execution.				
	2.	property of the text box control is used to show text in the text box.				
	3.	The environment enables the user to design, edit, or remove error in the program.				
	4.	The default extension of form file is				
	5.	is the action that can perform on an object.				
	6.	This text-box property with value true/false control whether the text can span to more than one line or not.				
C.	Tic	k the correct Answer.				
	1.	Which control is used to write uneditable text on the form?  i) Label ii) Text box iii) Button iv) All of these				
	2.	Which property of button tool is use to set whether the button will respond to an event or not.				
		i) Enable ii) Visible iii) Hidden iv) None of these				



- 3. IDE stand for
  - i) Independent development environment
  - ii) Integrated drawing event
  - iii) Integrated development environment
  - iv) Independent drawing environment
- 4. Which form property is use to set the text colour that appear on the form?
  - i) Fore colour
- ii) colour
- iii) Font colour
- iv) back colour
- 5. Visual basic is an event driven programming language. Which of these in an event in visual basic?
  - i) Pressing a key

- ii) Opening a form
- iii) Single click a mouse button
- iv) All of these
- 6. Which command is use to run the visual basic project?
  - i) Project-Run
- ii) Debug-start-Debug

iii) File-Run

iv) Project-Debug

## D. Answer the following Questions:

- 1. Visual basic being an event driven language, support various language. Name any two event supported by mouse.
- 2. Describe various properties supported by text box control.
- 3. Define different modes available in VB.

A. 1. All the above

2. Both a and b

3. Form

- 4. Text
- 5. Integrated Development environment.
- **B.** 1. Button control This is one of the most useful control on a form use to execute the code by clicking on it.
  - 2. Text box control This Control is use to receive text information or numeric value from the user that can be used in the program.
  - 3. Label control The label control on a form are use to display the text that cannot be edited by the user.
- C. 1. Visual Basic is a GUI based object oriented language that not only allow us to create GUI based application but also help us to develop complex application.
  - 2. Event driven programming language means, we have to decide what to do with the program, Whenever we want to click command button, or we want to enter text in a text box or we might want to close program. It is an incident that happen to the object due to the action of the user such as clicking or pressing of a key on the key board.
  - 3. Visual Basic IDE means An IDE means 'Integrated Development Environment' which provides various tools to developed window based application. The IDE allows to design, edit or remove the errors from the program from the common place.
  - 4. The property window is used to set the properties for the object or controls used in the application.
  - 5. i) Label control The label control on a form are use to display the text that cannot be edited by the user. They are used to identify the object on the form or to provide description about a control like text box etc.
    - Text box control The text box control is used to receive text information or numeric values from the user that can be use in the program.

## **Answers of Worksheet - 1**

- **A.** 1. True
- 2. True
- 3. True
- 4. True

- 5. False
- 6. True
- 7. False



- **B.** 1. IDE 2. Text 3. Debug 4. VB
  - Multi line.
- **C.** 1. Label (a) 2. Enable (a)
  - 3. Integrated Development Environment (c)
  - 4. Font colour 5. Debug-start debugging.
- **D.** 1. The two event supported by mouse are:
  - Mouse click This event is triggered when the user click in the text box.
  - ii) Mouse up, mouse down This event occurs when user presses any mouse button.
  - 2. The various properties supported by text box are:
    - Name This property is used to set the default name of the text box that can be used while coding.
    - Text used to set the default text to be displayed in the text box.
    - iii) Max length This property is used to set the maximum number of character that user can type in the text box control.
  - 3. Visual Basic has 3 distinct modes they are:
    - i) Design mode This mode is available when you are designing the interface or writing the code.
    - ii) Run mode This mode is available when you are running the code/program.
    - iii) Debug mode When you get some error during the run mode or pause the execution, It indicate that you are in debug mode which allow you to edit the code ad make necessary correction.



## Photoshop CS3: Editing the Images



In this chapter, students will learn about ideal programming language for beginners, i.e. QBasic.

- Teaching Objectives:
- About Photoshop CS3
- Retouch and healing tool
- Eraser tool, Blur tool
- Smudge tool, sharpen tool
- Brightness and contrast tool



## **Teaching Tips:**

While teaching this chapter, tell the student that Photoshop CS3 is very useful software for those who engage in photography and related job. This program can be used to create image from scratch or to alter existing image. It provide variety of tools which help us in various way to edit an image.

- Ask your students some oral questions like:
- Name any two photo editor software other then Photoshop.
- What is the use of paint brush?
- Name some tools available in paint brush.



#### **Evaluation:**

After explaining this chapter, let the students do course book exercise given at the end of the chapter. Give some more task for the students to do related with Photoshop.

Name:_		CI	ass:	Date:
A.	Rea	ad the clue and an	swer the following:	:
	1.	Software use to edi	t image	
	2.	Tool that can be us with parts around it	•	n image by replacing it
	3.	The tool which is ublemishes etc	• .	rfection like scratches,
	4.	The tool use to spre	ead and mixes the cor	ntent of the image area
	5.	It is use to erase al	l colour within a set of	tolerance
B.	Wr	ite 'True' or 'False'.		
	1.	The clone stamp to photo.	ol will help clear out s	cars or blemishes on a
	2.	The magic eraser to it black and white.	ool erases all colour i	n the image and make
	3.	Adjusting contrast means to increase/decreases red and blucolour from the image.		
	4.	Brightness is the amount of white found in the image.		
	5.	The smudge tool is use to remove scratches and blemis from the image.		atches and blemishes
C.	Ma	tch the following:		
		Α	В	
	1.	Sharpen tool	Amount of white ligh	t found in image
	2.	Smudge tool	Allow you to fade the	e image
	3.	Brightness	Retouch the image	
	4.	Blur	Increase the contras	t among adjacent pixel
	5.	Patch tool	Spread and mix con	tent of image

- **A.** 1. Spot healing brush
- 2. Clone

3. Smudae

4. Back ground eraser

- 5. Brightness.
- **B.** 1. Spot healing tool This tool allow you to fix image imperfection such as scratches, blemishes etc.
  - Patch tool This tool retouches the image using sampled pixel or pattern. It works in combination with healing brush and lasso tool.
  - 3. Smudge tool The smudge tool spreads and mixes the content of the image areas.
  - 4. Blur tool This tool help us to fade the selected part of the image.
  - 5. Magic eraser tool This tool erase all colours within a set of tolerance. This is same as magic wand and hitting delete.
- C. 1. Spot healing brush
- 2. Sharpen tool

3. Blur

- 4. Brush tool and marker tool
- 5. Smudge tool
- **D.** 1. Retouch tools are such tools and features that are use for retouching photographs.

The examples of retouch tools are:

- i) Spot healing brush
- ii) Clone tool
- iii) Patch tool etc.
- 2. Spot healing brush It is a tool that can be used to erase part of an image by replacing it with part around it.
  - Healing brush This tool allow you to fix image imperfection such as scratches and blemishes.
- 3. Smudge tool This tool spreads and mixes the content of the image area.
- Sharpen tool The sharpen tool in Photoshop elements increases the contrast among the adjacent pixels to give the illusion that things are sharper.
  - Brightness tool is use to increase or decrease the amount of brightness in the image.
- 5. Blur tool This tool is use when you do not want to show some part of the image to theviewer due to any reason. By using this tool one can make the selected part of the image blur.



## **Answers of the Worksheet**

A. 1. Photoshop

- 2. Spot healing brush
- 3. Healing brush.
- 4. Smudge tool
- 5. Magic eraser tool
- B. 1. True
- 2. False

False

- 4. True
- 5. True
- C. 1. Increase the contrast among adjacent pixel
  - 2. Spread and mix content of image.
  - 3. Amount of white light found in image.
  - 4. Allow you to fade the image
  - 5. Retouch the image



## Network Devices and Topologies



In this chapter, the students will learn about computer network and its types.

- Teaching Objectives:
- The student will learn:
- Computer Network and its types.
- Network Topologies.
- Hardware requirement for a network.
- Network cable and stuff.
- Server and workstations.



## **Teaching Tips:**

While teaching this chapter, tell your student that you will learn about computer network and its types. Different topologies used in the network and their advantages and disadvantages. You will also learn about the various hardware used in the network. Explain them about server and workstations.

- Ask them some oral questions:
- What is Internet and Intranet?
- What is transmission media?
- Give some examples of network device.



## **Evaluation:**

After explaining this chapter, let the students do the exercise given at the end of the chapter. Given some extra question related with the topic for the students to solve.



Name:

## Worksheet - 1

Data:

Clace.

ITG			Date:			
A.	Wr	ite 'True' or 'False'.				
	1.	WAN combines only one LAN that are geographically separated.				
	2.	Radio and infrared	signals are use in co-axial cable.			
3. MAN spread upto 5 km.			km.			
	4.	Maximum 100 comp	outers can be connected in a LAN.			
	5.	In bus topology all t	he nodes are connected to a single cable.			
B.	Fill	in the blanks:				
	1.	In topology the computers are connected to each other to make a Loop.				
	2.	In star topology all the components of a network are connected to central device called				
	3.	are used to connect a PC to a network.				
	4.	In cable two copper wire are connected with each other in a helical form.				
	5.	to all the computer of	an application or device that provide service connected to it.			
C.	Ma	tch the following:				
		Α	В			
	1.	Bus Topology	Hub/switch			
	2.	Star topology	For a loop of computers			
	3.	Ring topology	Terminator			
	4.	Modem	Filter network traffic			
	5.	Router	modulator/demodulator			
	6.	Fiber optics	carries data in form of light			
D.	An	swer the following				

Define server and its types.
 Write short notes on fiber optics.

What is the use of repeaters in a network?



- A. 1. d. All the above
- 2. d. None of these

3. b. WAN

4. d. All of them

- 5. b. Repeater
- **B.** 1. LAN The full form is Local Area Network. It is use to connect two or more computer in a building or in a campus upto 100 computer, can be connected in a LAN.
  - MAN The full form is Metropolitan Area Network. This is a network that span over a physical area like a city or across the city. It covers area upto 50 km and can be owned and operated by government bodies or large corporation.
  - WAN Full Form is Wide Area Network which combine multiple LAN that are geographically separated. It spread across the continents.
- C. 1. WLAN
- 2. LAN
- 3. Network

4. BUS

- 5. Tree.
- **D.** 1. Computer Network is a system in which two or more computers are interconnected with each other and can share their resources including (Devices, Data, Files) etc.
  - 2. The five components of network are -
    - Network Interface Card It is commonly referred as NIC and are use to connect a PC to network. It provide a physical connection between the networking cable and computer internal bus.
    - ii) Hubs/Repeater They are use to connect together two or more ether segment of any media type. Hub provide the signal amplification required to allow a segment to be extended to greater distance.
    - Router It filter network traffic by specific protocol rather then by packet address. Router also divide network logically instead of physically.

- iv) Modem It is a short of modulator/demodulator. It is a device that convert digital signal generated by a computer into analog signal that can travel over phone line.
- v) Bridge This network device is used to connect two group of network of same type.
- 3. Wireless technology do not require cable to connect to each other. Radio and infrared signals are used to communicate between machines using a wireless local area. Wireless technology offer a surprising amount of mobility for user with laptop and smart phones.
- LAN Stand for Local area connection. This network is use to connect upto 100 computers in a building or in a area upto 3 km. The computers are connected with each other through cable.
  - WAN Stand for wide area network. This network spread across the continents and are used to connect computers or network through satellite.
- 5. Topology means arrangement of computers in a network.

The two types of topologies are:

- Bus Topology It is the simplest of network topologies. In this type of topology, all the nodes are connected to a single cable called backbone which is provided with terminator at both the end. It is easy and cheapest as less cable is required to connect nodes.
  - (see the diagram from the book)
- ii) Star topology In star topology all the components of network are connected to a central device called the hub, a router or a switch. All the nodes in the topology is connected to the centralized device with a point to point connection. In this topology long cable is required and central node dependency is there.

(see the diagram from the book)

## E. 1. Bus topology Advantage:

- i) It is easy to set-up and cheap.
- ii) It is good for LAN and used in small network.
- iii) Less cable is required to connect different nodes.

#### Disadvantage:

- Proper termination is required to dump signal. Use of i) terminator is must
- It is difficult to detect and troubleshoot fault. ii)
- 2. Ring Topology Advantage:
  - These is no need of network server to control the connectivity i) between nodes.
  - Even when load is increased, its performance is better. ii)

#### Disadvantage:

- i) If one workstation or port goes down, the entire network gets collapsed.
- Network is highly dependent on the wire which connect ii) different component.
- 3. Star Topology Advantage:
  - It helps in monitoring the network from a centralised position. i)
  - failure of one node does not affect the other. ii)
  - It is easy to detect the failure and trouble shoot it. iii)

### Disadvantage:

- Too much dependence on central device. If it fails the whole i) network collapse.
- The use of central device like hub switch or router over all ii) cast of the network.

## **Answers of Worksheet - 1**

- **A**. 1. False False 3. False 4 True 5. True **B.** 1. Ring 2. Star 3. NIC
  - 4. Twisted pair 5. Server
- 1. Terminator 2. Hub/switch C. 3.
  - For a loop of computers 5. Filter network traffic 6. carries data in form of light

4.

modulator/demodulator

D. 1. Server is an application or device that performs service for connected clients as part of client server architecture. It can also



- be a computer system that has been designated for running a specific server application. Types of servers are application server, web server, etc.
- Fiber optics are the network cables and are most expensive.
   These cables are smaller and can carry a vast amount of information fast and over long distances. Fiber optics transmit data in the form of light particles or photons that pulse through a fiber optic cable.
- 3. Repeater are used to connect together two or more ethernet segments of any media type. In larger designs, signal quality begins to deteriorate as segments exceed their maximum length. It provide the signal amplification required to allow a segment to be extended to agreater distance.