Salam Prep Secondary School

Language Department

Answer's Guide of "Computer and information Technology" Book

Third Prep

First Term 2021 / 2022

Name : .....

Class : .....

Chapter (1) key answer

Questions

First: Put (✓) in front of the correct sentence and (X) in front of the wrong one:

(1)	Flowcharts use standard symbols and lines to represent a problem algorithm.	(√)
(2)	You can use any Geometric shape to represent Algorithm when drawing flowcharts.	(×)
(3)	The symbol  is used to represent start and end of flowchart.	(√)
(4)	The rectangle symbol  is used to represent the data input operation.	(×)
(5)	The symbol  is used to represent a decision process in flowcharts.	(√)
(6)	The problem means that an objective or output is required to reach.	(√)
(7)	Preparing a cup of tea is an example of a problem.	(√)
(8)	Problem solving is the steps, activities, and processes to be done to reach an output or objective.	(√)
(9)	The program documentation is a set of procedures arranged logically for solving a specific problem.	(×)
(10)	The program testing is writing down all the steps taken to solve a problem.	(×)
(11)	Documenting the program means making sure that the program is free of errors.	(×)
(12)	Algorithm is a set of procedures arranged logically for solving a specific problem.	(√)
(13)	The program documentation is writing down all the steps taken to solve a problem.	(√)
(14)	Testing the program means making sure that the program is free of errors.	(√)
(15)	Flowcharts are diagram representations which depend on drawing some standard symbols to clarify the order of procedures to solve a problem.	(√)
(16)	Flowcharts help to facilitate understanding of the problem, analyse and convert it to a program.	(√)

Second: Choose the appropriate answer to complete each phrase of the following:

1- Steps, activities and procedures to be done to reach an objective or an output - can be called:

a. problem definition b. problem **c. problem solving**

2- On drawing flowcharts we use:

a. standard symbols and lines b. all geometric figures c. one geometric figure

3- A set of procedures arranged logically for solving a specific problem – can be called:

a. problem **b. algorithm** c. program testing

4- Making sure that the program is free of errors – can be called:

a. program testing b. program documentation c. algorithm

5- Writing down all the steps taken to solve a problem errors – can be called:

a. program documentation b. program testing c. flowcharts

6- **Problem-solving includes many terminologies, the terminology that expresses the preparation of a cup juice is:**

a. Flowchart b. algorithm c. problem

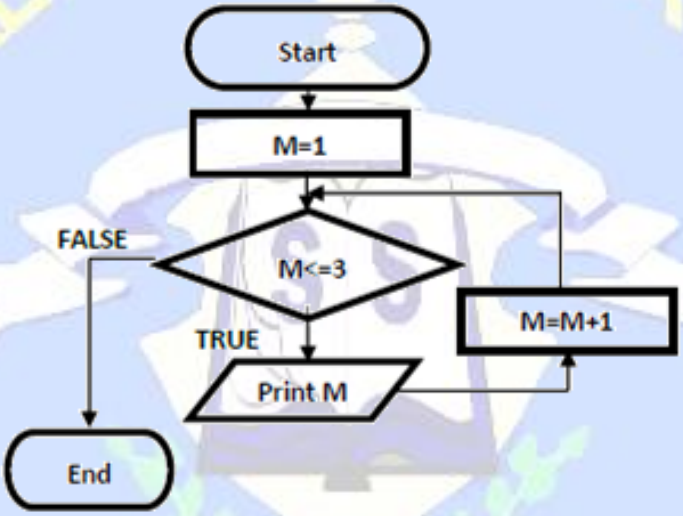
7- **Problem-solving approach includes many of the terminologies, the terminology that expresses the mathematical problem is:**

a. Algorithm b. problem c. program design

8- **A diagramatic representation that depends on drawing some standard symbols to clarify the order of procedures to solve a problem can be called:**

a. Problem b. algorithm c. flowchart

9- **In the following flowchart:**



The number of iterations (print the value of M) is:

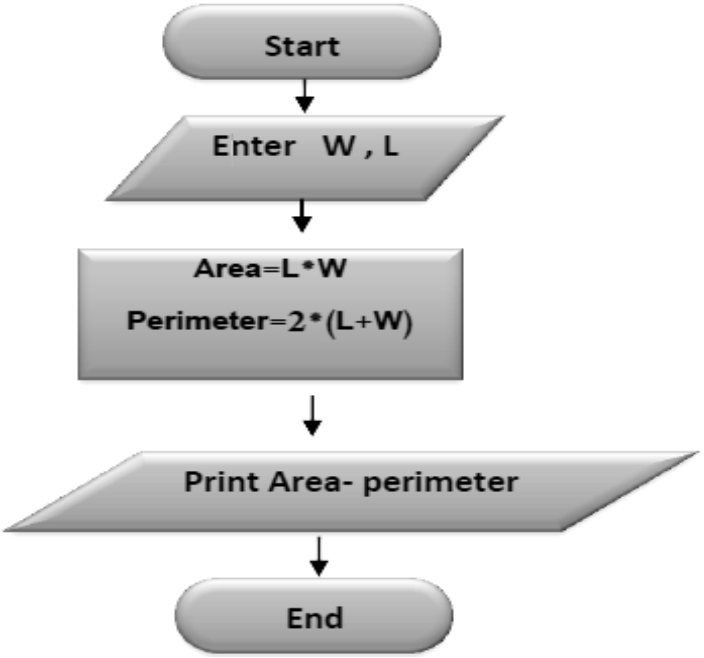
a- 2 b- 3 c- 4

10- **In Flowchart of the previous question, the value of M after the end of the iterative loop equals:**

a. 2 b- 3 c- 4

Activity (1-1)

Write down the Algorithm, and draw a flowchart to compute the area and the perimeter of a rectangle whose length (L) and width (W) are known, bearing in mind that the equation of the area is: Area =L*W and that of the Perimeter is: Perimeter =2*(L+W).



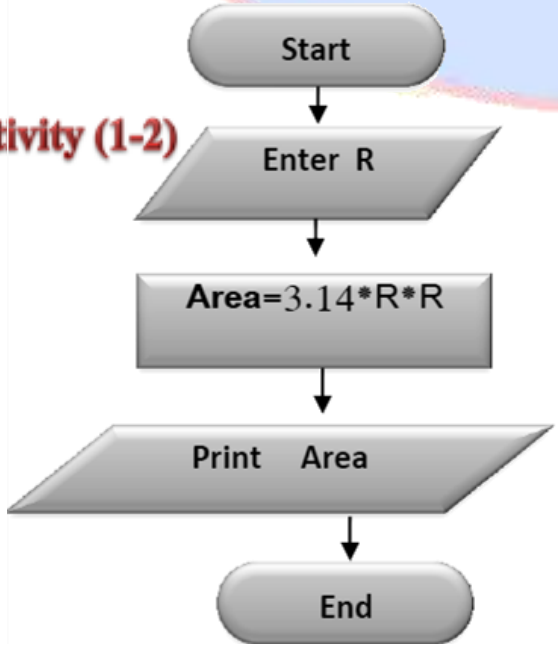
Activity (1-2)

Write down the Algorithm, and draw a flowchart to calculate the area of a circle whose radius "R" is known, bearing in mind that the equation of the area of circle is: Area =3.14*R*R.

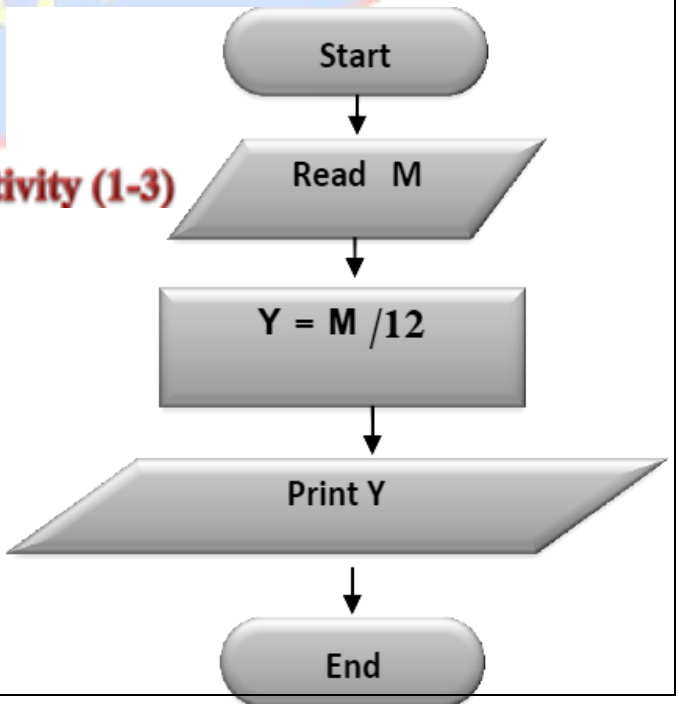
Activity (1-3)

Write down the Algorithm, and draw a flowchart to calculate the number of years, bearing in mind that the number of months is known.

Activity (1-2)



Activity (1-3)

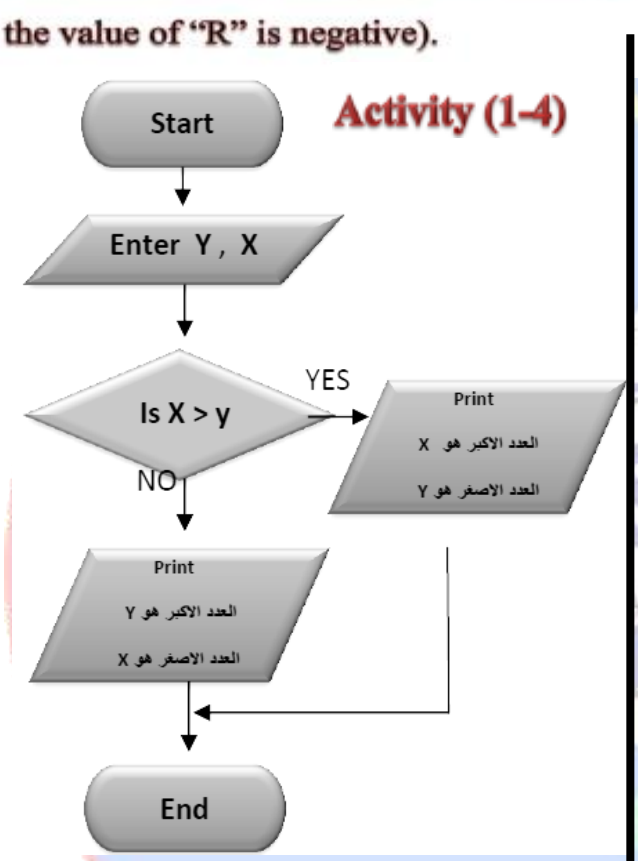


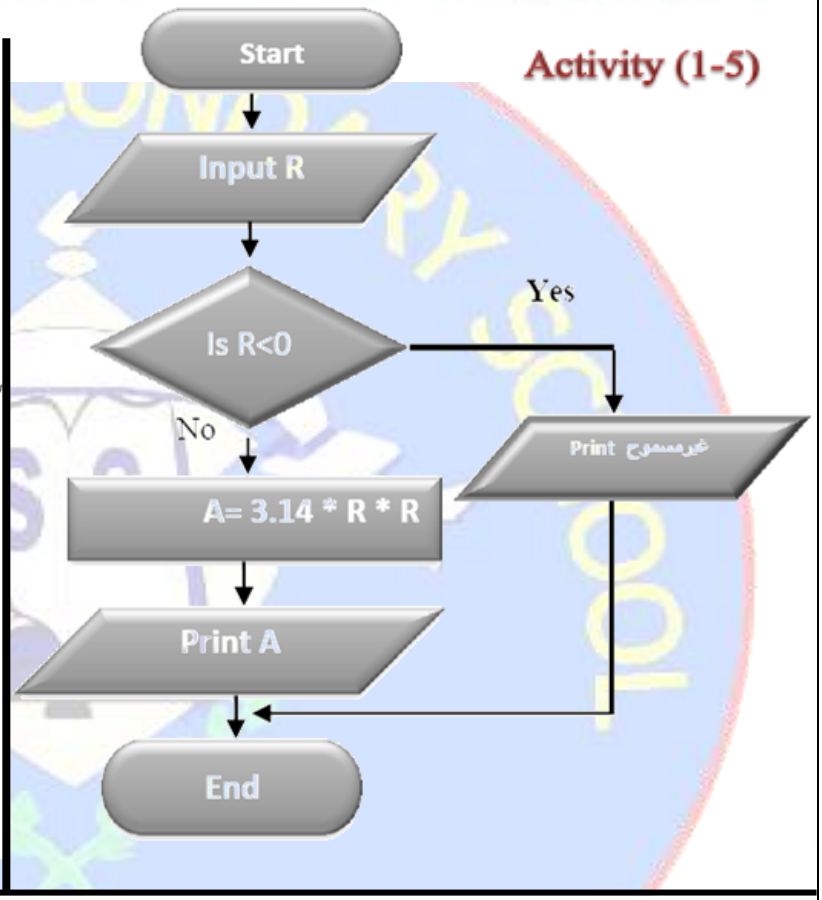
Activity (1-4)

Write down the Algorithm, and draw a flowchart to enter two unequal numbers, then Print "the largest is …? "and, "the smallest number is…? ".

Activity (1-5)

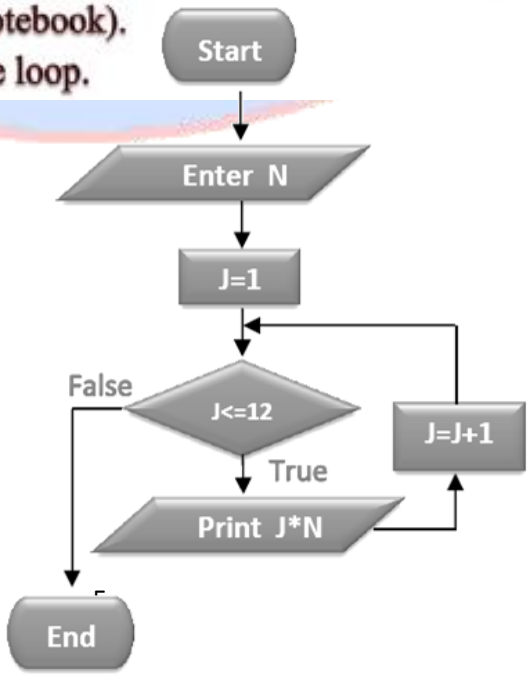
The following flowchart is used to calculate the Area of a circle with radius "R". Redraw the Flowchart so that it displays the message "not allowed "and exits from the program (When the value of "R" is negative).





Activity (1-6)

Track the values of the variable (J), and the printed value on executing every step in the previous exercise (write down in your notebook).
What is the value of J after the end of the loop.



Activity (1-7)

Write down the Algorithm, and draw a flowchart to print out even numbers from 1 to 10.

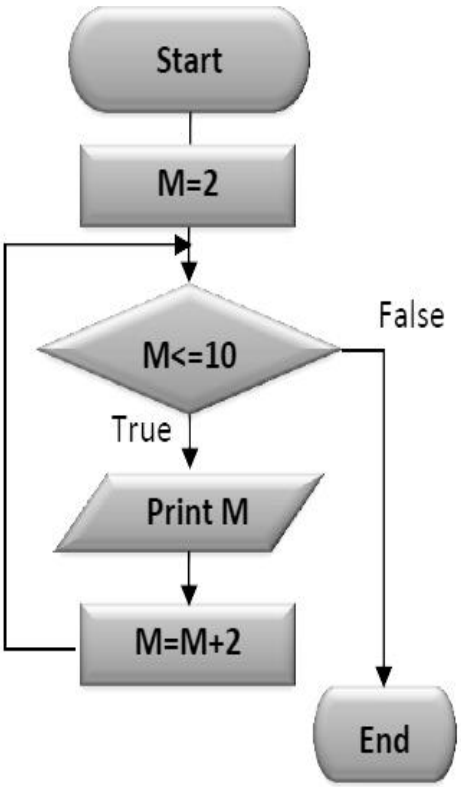
Activity (1-8)

Redraw the Flowchart of the previous exercise in your notebook after modifying it to print out the sum of odd numbers from 1 to 10.

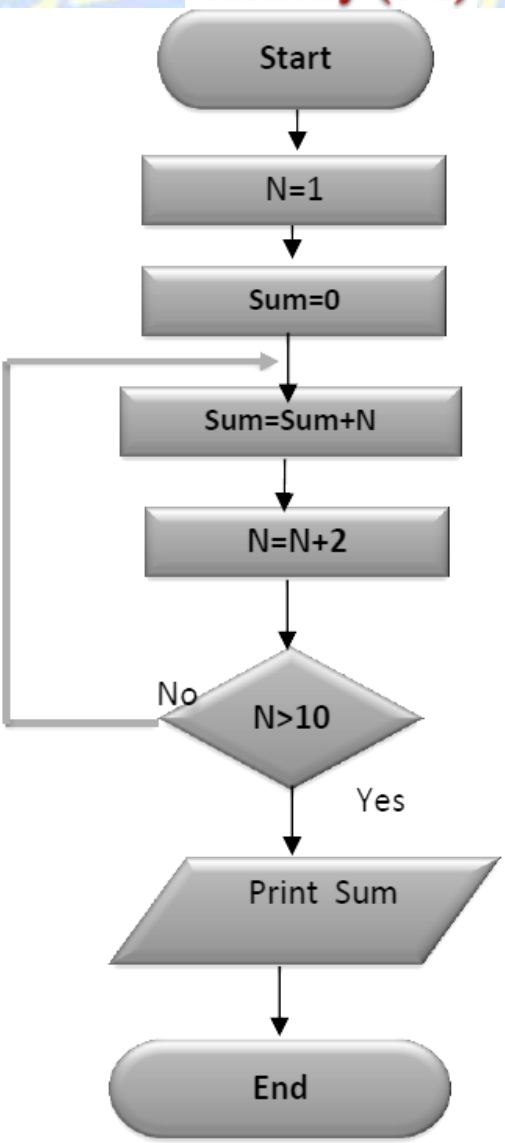
Activity (1-9)

After executing the previous activity, draw the flowchart in your notebook to print out the sum of even numbers instead of the odd ones.

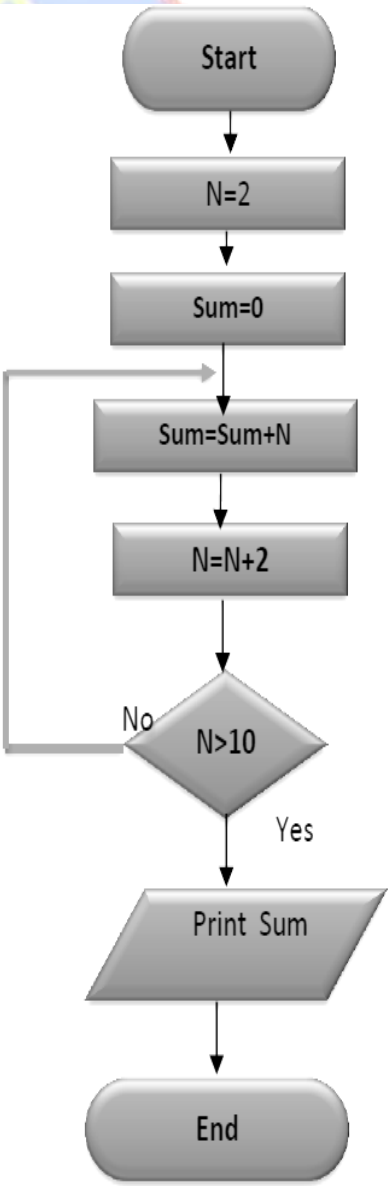
Activity (1-7)



Activity (1-8)



Activity (1-9)



Chapter (2) key answer

Questions

First: Put (✓) in front of the correct sentence and (X) in front of the wrong one:

N	Question	Answer
1-	The VB.net language is one of the high level languages.	(√)
2-	The VB.net language is one of Event Driven languages.	(√)
3-	The VB.net language is the only high level language.	(×)
4-	The VB.net language is considered a high level language because it is easy to learn.	(√)
5-	The VB.net language is used in producing Windows applications and Web applications.	(√)
6-	The VB.net language is used in producing Web applications only.	(×)
7-	The VB.net language can't be used in producing Windows applications	(×)
8-	Every Object is characterized by certain properties and certain behaviour when a certain event occurs on it.	(√)
9-	Events and procedures which belong to any object in VB.net language are called properties.	(×)
10-	The name, the size and colour of an object are all samples of events that can occur to the object in VB.net language.	(×)
11-	The name, the size and colour of an object are all samples of properties of some objects in VB.net language.	(√)
12-	The Events are the commands and instructions which are carried out when a certain procedure occurs to the object in VB.net language.	(×)
13-	The procedures are the commands and instructions which are carried out when a certain procedure occurs to the object in VB.net language.	(×)
14-	Pressing click and D-click are samples of some events that can occur to an object in VB.net language.	(√)
15-	Framework.net contains Compilers, libraries and runtime environment	(√)
16-	Compilers in Framework. Net are considered the environment of runtime for applications which are produced in VB.net language.	(×)
17-	Compilers are programmes that translate commands and instructions written by the programmer from the high level language into machine language.	(√)
18-	Object Oriented Programming Languages are the languages that work through objects in memory.	(√)
19-	All programming languages which carry out a group of commands and instructions are considered as Event Driven languages.	(×)
20-	Visual Studio is considered IDE because it includes a group of tools, elements and characteristics necessary to produce applications.	(√)

Second: Choose the correct answer to complete each statement:

1-Object Oriented programming language depends on:

a- using Windows applications.
b- Using Web applications
c- Objects in computer memory.

2-You can produce Windows applications or Web applications by using:

a- Objects in computer memory
b- VB.net language
c- Properties and Events

3- Characteristics which describe the object such as size, name and colour are called:

a- Properties
b- procedures
c- Events

4-Click on Button is:

a- property
b- procedure
c- Event

5-Commands and instructions which we want to carry out are called:

A -properties
B -producers
c - Events

6- The Properties term refers to:

a- Features that describe the object.
c- Events that can occur to the object.
c- Commands and instructions that are carried out.

7-The Events term refers to:

a- properties that describe the object.
b- Events that can occur to the object.
c- Commands and instructions that are carried out.

8-The Procedures term refers to:

a- properties that describe the object.
b- Events that can occur to the object.
c- Commands and instructions that are carried out.

9-libraries, Compilers and Environment of runtime of applications are the most important components of:

a- Object Oriented.
b- Event Driven.
c- Framework.net.

10- IDE is called:

a- Visual Basic.net
b- Visual Studio.
c- Framwork.net.

Chapter (3) key answer

Questions:

First : Put (√)in front of the correct statement and(×) in front of the wrong one :-

N	Question	Answer
1	The function of the property RightToLeft of the Form is to define the direction of Controls from right to left.	(√)
2	The function of the property RightToLeft of the Form is to define the state of the Form on the screen in a position of Maximizing or Minimizing.	(×)
3	Setting the property ControlBox of the Form can control the Form in a position of Maximizing during programme runtime.	(×)
4	The property"Name" is used in showing a certain Text in the title bar of user window a name of the window.	(×)
5	The property Text is used in showing a certain text the title bar of of user window.	(√)
6	Setting some properties of the Form is applied to Controls which are placed on the Form.	(√)
7	The effect of setting the WindowState property of the form appears only in runtime mode	(√)
8	You can change the location of Command Button on the Form through Size property.	(×)
9	You can change the location of Command Button on the Form through Location property.	(√)
10	Placing Controls automatically on the Form on the co-ordinate (0-0) is in the middle of the Form.	(×)
11	You can change the size of Label manually if AutoSize=true	(×)
12	You can change the size of Label manually if AutoSize=false	(√)
13	"Textbox control tool: is the only tool which has the property passwordChart	(√)
14	"Textbox control tool: is the only tool which has the property AutoSize	(×)
15	ListBox and ComboBox share in "Items" property.	(√)
16	ListBox and and ComboBox share in " Suggest " property	(×)
17	GroupBox is the tool used in containg a group of controls, these controls have the same function on the Form.	(√)
18	ListBox is the tool used in containg a group of controls, these controls have the same function on the Form.	(×)
19	CheckBox can be used on the Form to choose the Gender of student male or female.	(×)
20	Combobox is the control tool that allows the user to choose one element of several elements in the smallest possible space on the form window	(√)

Second: Choose the correct answer to complete each statement:-

1- The function of "Right to Left" property of the Form is:

a- define the direction of Control tools from Right to Left.

b- Define whether the layout of ControlTools on the Form is from Right to Left.

c-define the state of the window in a state of maximaizing or minimaizing.

2- ControlBox property of the Form is helping to:

a- showing or hiding of Maximaizing Box.

b- Control the appearance of the Form whether it is in a position of Minimaizing / Maximaizing / Normal.

C-Control the appearance or disappearance of ControlBox in the Form.

3-The used property in showing a certain Text on the titlebar of a Form is :

a- Name b-Text c-FormBorderStyle

4-On setting some properties of the Form, they are applied on Control Tools Which are placed on the Form (one of them is):

a-Name b-Forecolor c-Text

5-The effect of setting this property doesn't appear unless in runtime mode (This property is):

a-FormBorderStyle b-WindowState c-RightToLeft

6-The property which is responsible for the size, shape and effect of the Text font shown on the Button is :

a-Backcolor b-Forecolor c-Font

7-You can change the position of the Button on the Form through the following processes except for:

A-drag and drop by the mouse b-setting Size property c-setting Location property

8-You can change the position of the Button on the Form through:

a.setting Location property b-setting Size property c-the eight squares around the Button

9-On inserting any ControlTool by pressing D-Click from the ToolBox on the Form , the appropriate place to be shown is :

A-coordinate (0, 0)
b-the middle of the Form
c-the position of ControlTool is different according to the size of the Form

10-The size of Label is defined automatically on the Form if the property is:

a-AutoSize = False b- BorderStyle= FixedSingle c- AutoSize=True.

11-You can change the size of control "Label" manually if the property is :

a- AutoSize = False- b- BorderStyle= FixedSingle c- AutoSize=True-

12-The following properties belong to TextBox except for:

a-AutoSize b-MultiLine c-MaxLength

13-The Object TextBox is marked by one property:

a-AutoSize b-Name c-PasswordChart

14-The right value which can be used to set the PasswordChart of the TextBox is:

a-Pw b-True c-*

15-The ListBox and ComboBox share in this property:

a-Suggest b-Item c-SelectionMode

16-The ControlTool which is used in containing a group of controls that have the same function on the Form is:

a-ComboBox b-ListBox c-GroupBox

17-The Control tool which can be used on the Form to choose Gender of the student "male"or "female" is:

a-RadioButton b-CheckBox c-TextBox

18-The ControlTool which can be used on the Form and allows the user to choose more than one alternatives is :

a-RadioButton b-GroupBox c-CheckBox

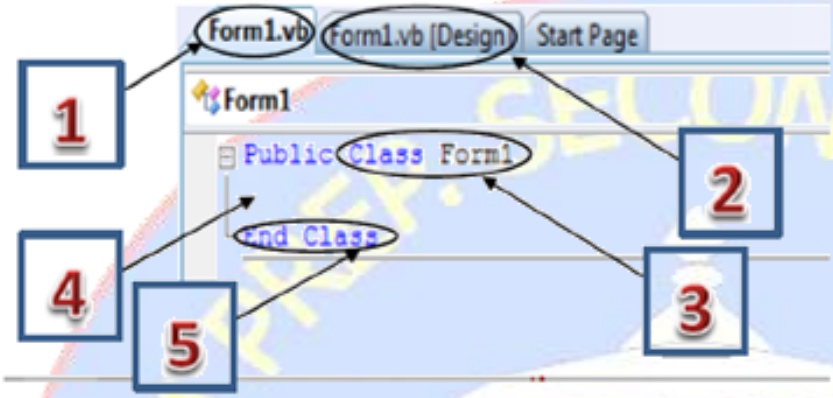
19-The ControlTool which allows the user to choose one item of 15 in the smallest possible area on the Form is:

a-ComboBox b-ListBox c-RadioBox

Chapter (4) key answer

Questions

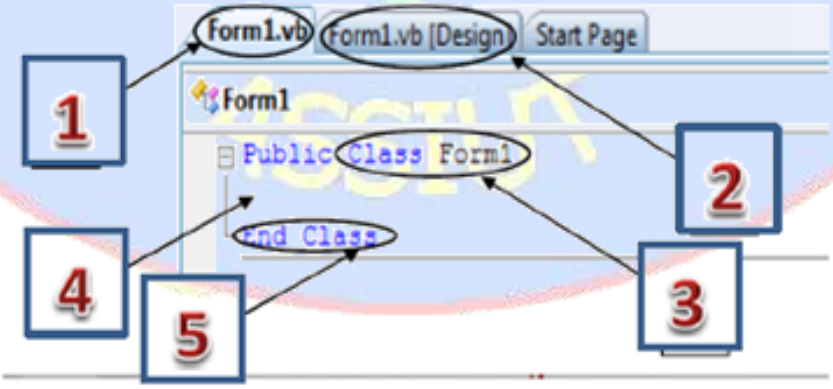
1) **Complete the table with a number from 1 to 5 using the next screen to express every number to what it refers to:**



Number	Indicate
(.....)	The end of class
(.....)	The place to write the codes of the class
(.....)	The name of the file that saves the design of the form interface
(.....)	The name of the file that saves the code
(.....)	The start of the class

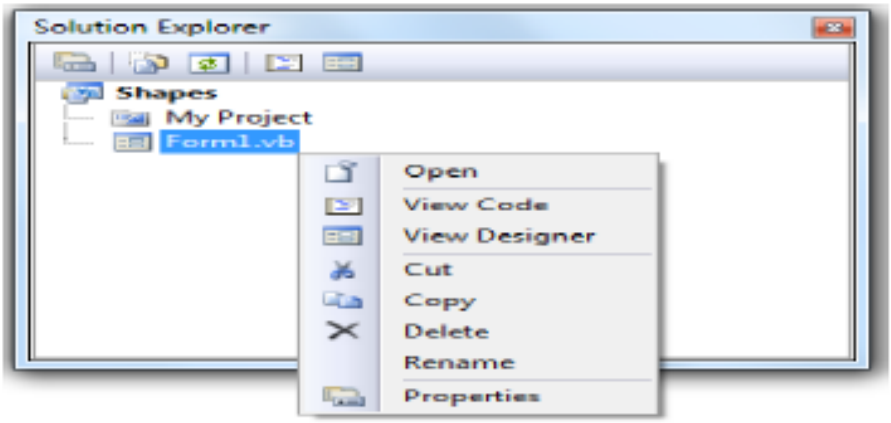
5
4
2
1
3

2) **Complete the table using the next screen:**



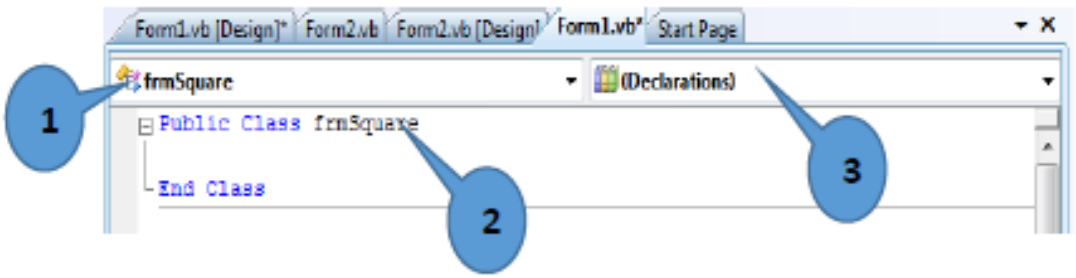
No	Indicates
1	The name of the file that saves the code
2	The name of the file that saves the design of the form interface
3	The start of the class
4	The place to write the codes of the class
5	The end of class

3) **complete the table using the next screen :**



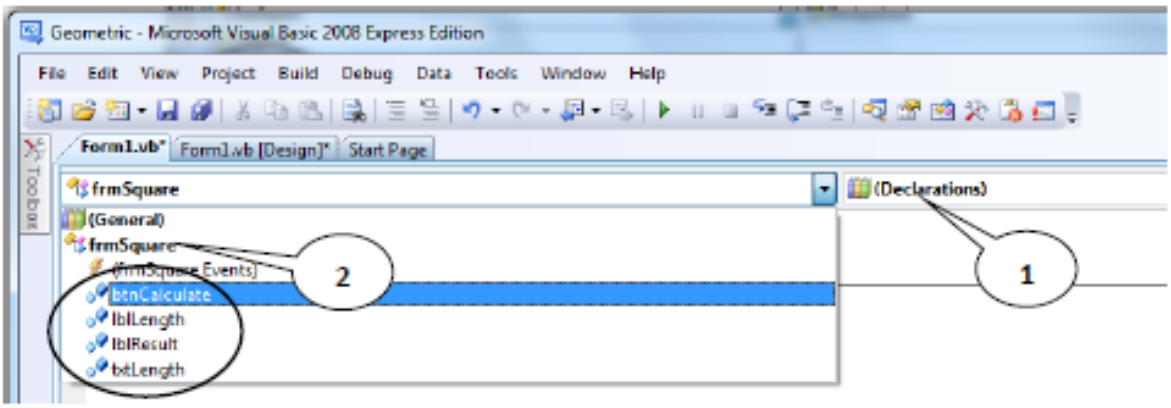
Question	indicates
1	The name of the solution is ..... shapes
2	The name of the project is..... shapes
3	We can enter the code window more than one way, through : • Command ..... View code in the shortcut menu • function key .....F7.....
4	The purpose of properties in the shortcut menu is Adjusting the properties of the selected object

4) **Complete the table using the following screen :**



Answer the questions using the following screen:

N	indicates
1	A drop-down menu of (Class Names) that displays the names of controls on the form.
2	Form name (frmsquare)
3	A drop-down menu of (Method Names) or events; associated with the item selected from the (Class Names) menu



1– The number of forms is one

2– number (1) refers to **A drop-down menu of (Method Names) or events; associated with the item selected from the (Class Names) menu**

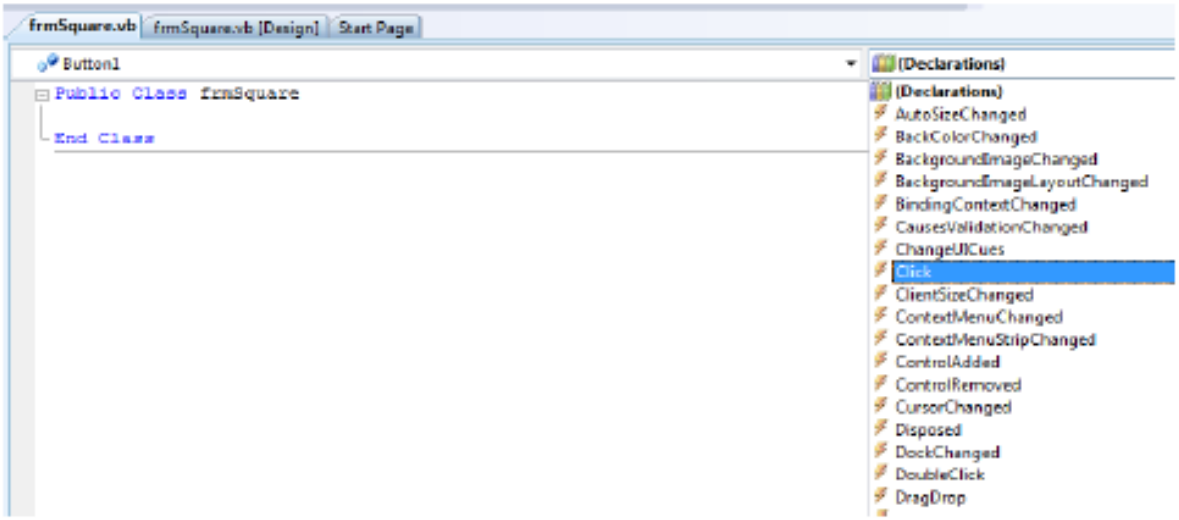
3– number (2) refers to **A drop-down menu of (Class Names) that displays the names of controls on the form.**

4– List three different control tools from the previous screen

- btncalculate
- lbllength
- txtlength

5– The name of the class is frmsquare

5) Answer the question using the following screen :



a- From the previous screen write 3 different events :

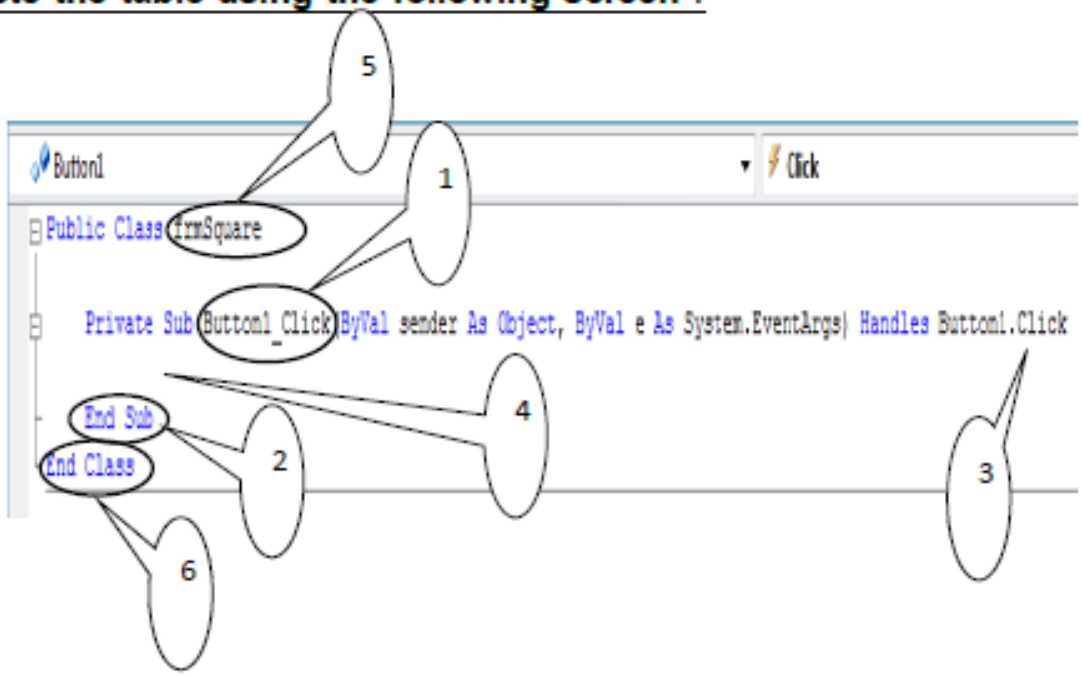
.....click Double click Autosizechanged

b- frmSquare refers to .....Class name

c- The events in the window belong to the control ..Button1.....

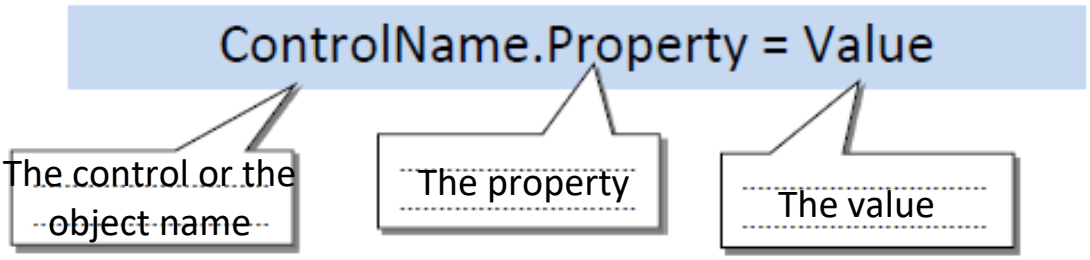
d- The name of the active tab in the window is .....Frmsquare.vb

6) **Complete the table using the following screen :**



NO.	indicates
1	The procedure name composed of (object name, event name).
2	End of procedure line.
3	What causes the call of the procedure (event occurrence) .
4	Between the two lines shown; the code that will be executed on calling the procedure is written after the occurrence of the (Event
5	The declaration of the class line (frmSquare)
6	The end of (class) line.

7) **Explain the components of the general syntax to adjust the properties of controls programmatically:**



8) **Explain the following codes through your pervious study for the general syntax to adjust the properties of control programmatically :**

(A) Button2.Text = "END"

The word “End” appears on the button2

(B) Label1.AutoSize = True

The Size of the Label is defined automatically according to the written Text when the Value of property equals true.

حل اسئلة الفصل الاول الوارده على موقع وزارة التربيه والتعليم

Chapter (1) : Problem Solving

Question 1 : Define:- 1- Problem 2- Problem solving 3- Algorithm 4- Flowchart 5- Program Testing 6- Program Documentation

Question 2: Write the problem solving stages.

Question 3: Write the scientific term :-

1- …….. is a situation that requires a solution or an objective you want to achieve through following consecutive steps sequentially.

2- ……..…… is the steps, activities, and processes to be done to reach an output or objective.

3- ……is one of the methods used to solve a problem through logically arranged procedures; a plan in the form of a series of successive steps .

4- ……. is a diagram that uses standard graphical symbols to illustrate the sequence of steps required for solving a problem or specific question.

5- …… means making sure that the program is free of errors.

6- ……. means writing all steps taken for solving the problem that include: given Input, output, plan for solving the problem, drawn flowchart, programming language used for coding , instructions, date of last modification of the program and, people who contribute to the program development process.

Question 4: Write three of the advantages of flowcharts.

Question 5: Program Testing is from the problem solving stages. Explain this sentence using an example.

Question 6 : **Complete the following table :-**

	A	B
1	…….	Writing all steps taken for solving the problem.
2	……..	means making sure that the program is free of errors.
3	……	It is a diagram that uses standard graphical symbols to illustrate the sequence of steps required for solving a problem or specific question.
4	…….	It is one of the methods used to solve a problem through logically arranged procedures; a plan in the form of a series of successive steps .
5	…….	It is a situation that requires a solution or an objective you want to achieve through following consecutive steps sequentially.

Question 7: Draw the suitable symbol for every function:-

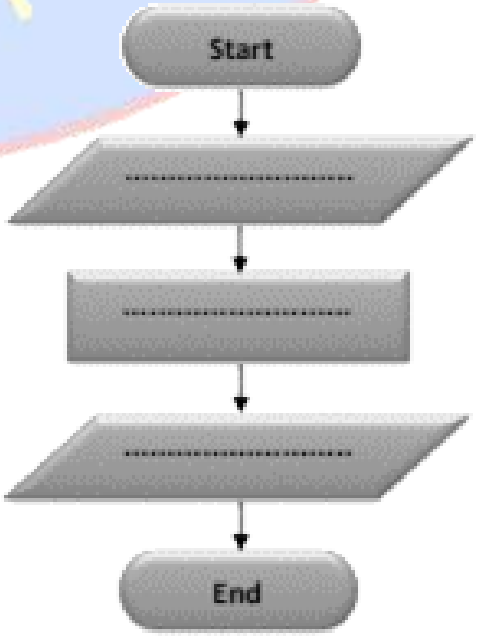
	The symbol	The function
1	…….	Making a comparison for decision.
2	……..	The link between symbols and forms of flowchart and illustrate the direction of the flowchart.
3	……	The beginning and the end of the flowchart.
4	……	It represents an arithmetic operation.
5	……	Read or enter a number and print the result.

Question 8: Draw the suitable symbol for the following expressions

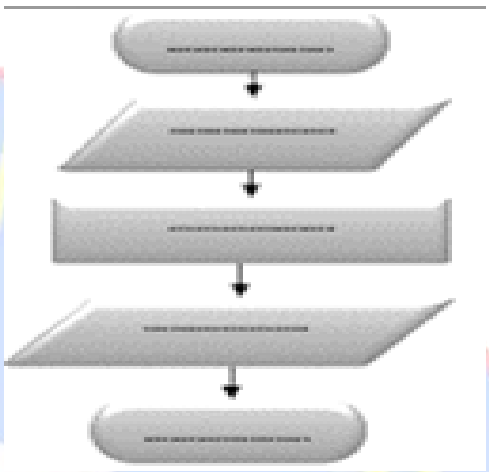
	The symbol	The function
1	…….	If A>20
2	……..	C=A+5
3	……	Read A,B
4	……	End the flow chart.
5	……	Input X,Y
6	……	Write M, L
7	……	If Name="Ahmed"
8	……	Start the flow chart
9	……	Name = "Ahmed"
10	……	Output A, B, 10

Question 9: The following Flowchart illustrate the steps of calculating the sum of two numbers ,their names are X, Y.

Complete the flowchart to print the result Z.



Question 10: **By using the following Algorithm , Complete the flowchart to solve the a first degree equation C = 5 A + 3**

The algorithm	The Flowchart
1- start 2- Enter value of A 3- Calculate C=5*A+3 4- Print the value of C 5- End	

Question 11: **By using the following Algorithm , Complete the flowchart to compare two numbers and print the largest number .**

The algorithm	The Flowchart
1- start 2- Enter value of N, M 3- IF N is greater than M then 3-1 Print N. 4- Else 4-1 Print M. 5- End	

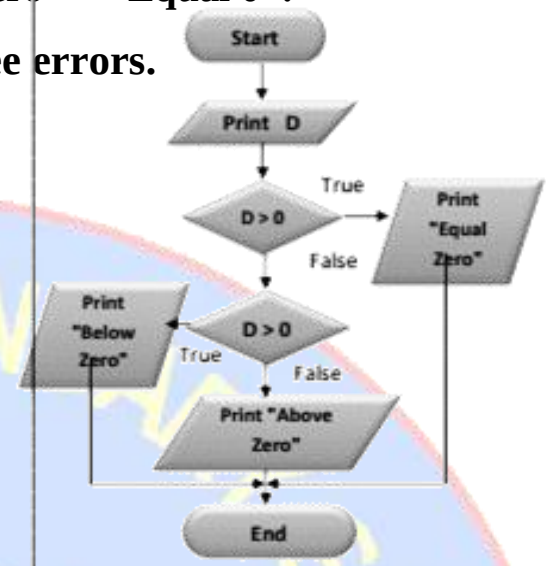
Question 12: **Draw a flowchart to compute the area of a rectangle whose length L and width W are known, bearing in mind that the equation of the area is : The area = Length × Width.**

Question 13: **Draw a Flowchart to calculate the average of three numbers, bearing in mind that**

The average = (first number+ second number+ third number)/3

Question 14: **The following Flowchart get a temperature degree, and print out the following results "above zero" – "below zero" – "Equal 0".**

Re-write the flowchart and correct the three errors.



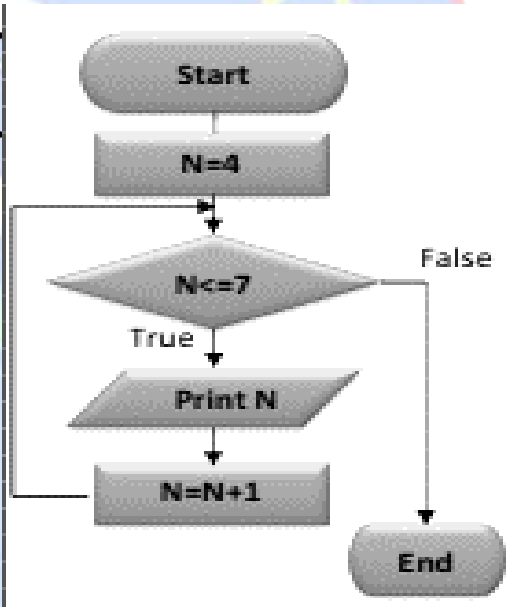
Question 15: **Answer the questions using the following flowchart:-**

1- The purpose of the flowchart: ……

2- The repetition statement is ……..

3- The expression N=N+1 means ……

4- The result which will be printed is ……



The answers

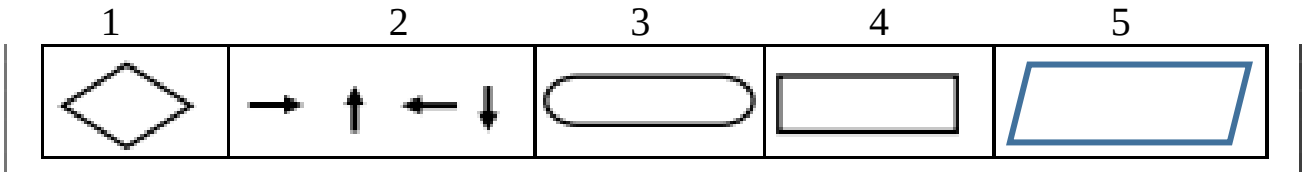
Question 5:-

During writing a program we unintentionally make some mistakes e.g. when we write a program to calculate the sum of two numbers 5,8 we may write a minus sign (-) instead of (+).we find the result is 3 and that is an error, so we cannot detect errors unless we begin entering data to the program with previously known results; and compare the results of the current program to those of the well-known results and so you can discover the errors and correct them.

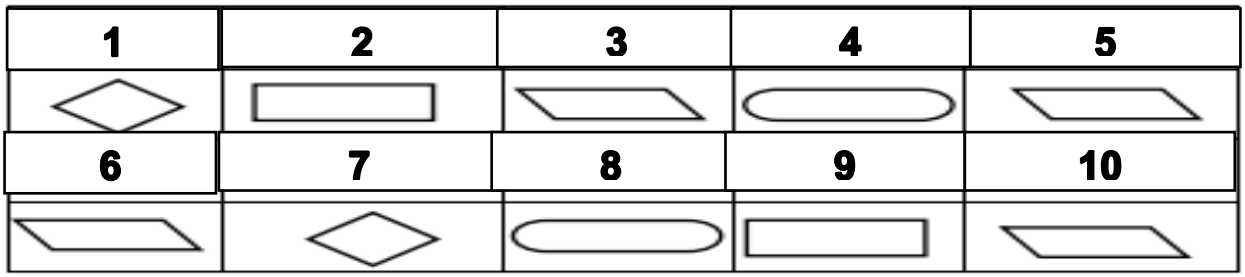
Question 6:-

1	2	3	4	5
Program documentation	Program testing and correcting the errors	Flow chart	Algorithm	problem

Question 7:-

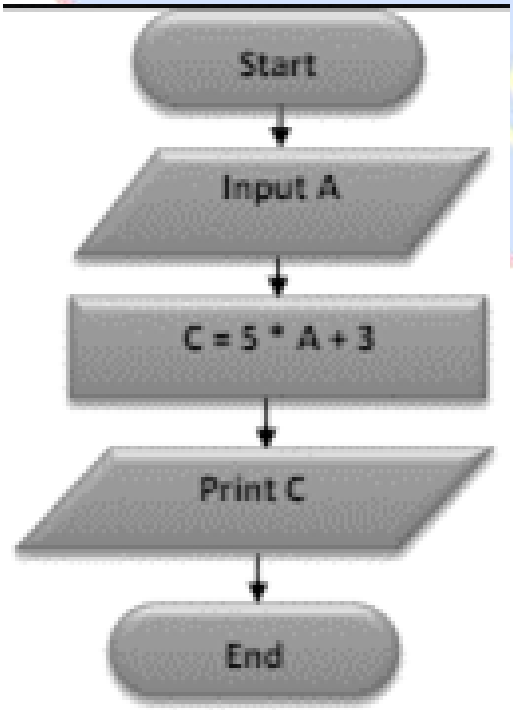


Question 8:-

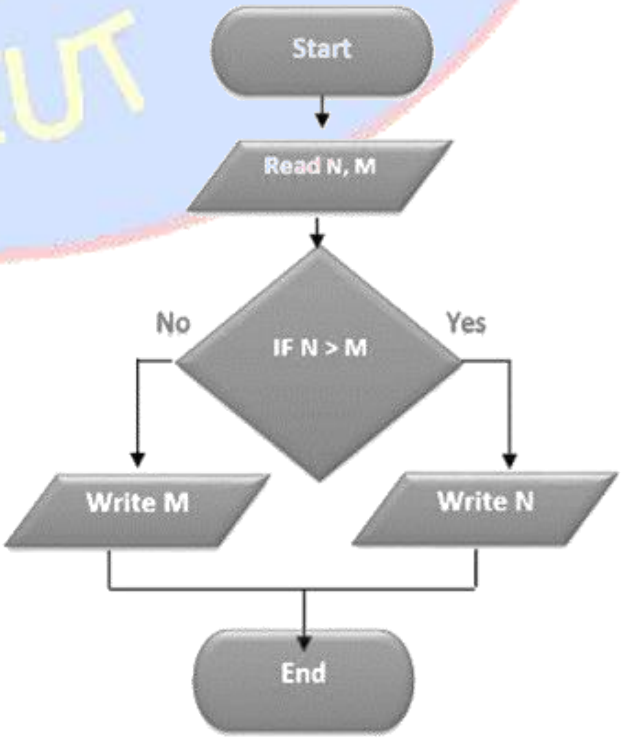


Question 9:-

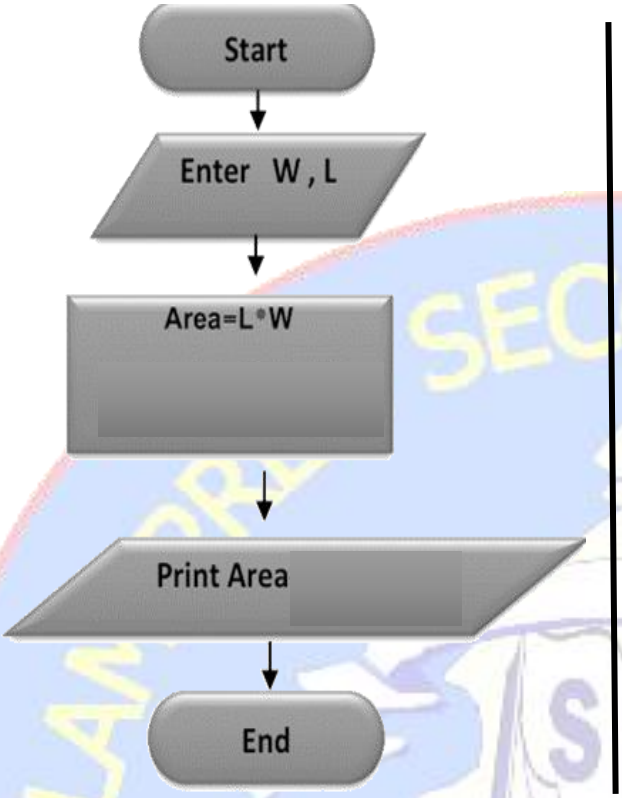
Question 10:-



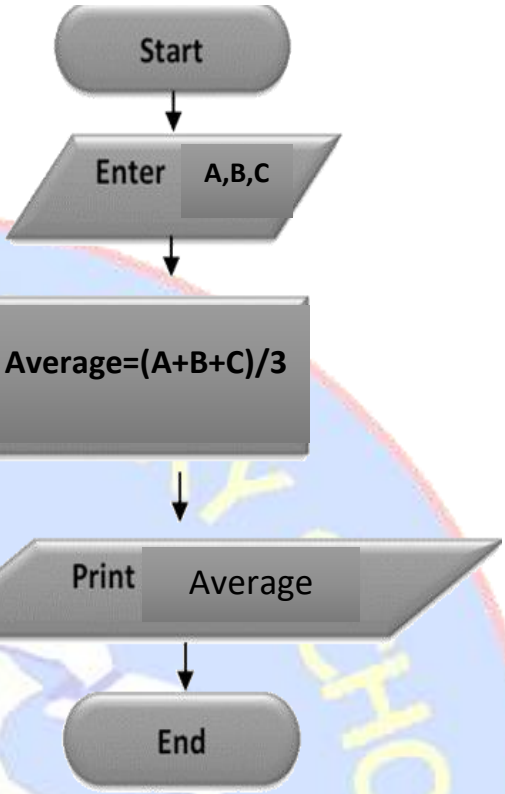
Question 11:-



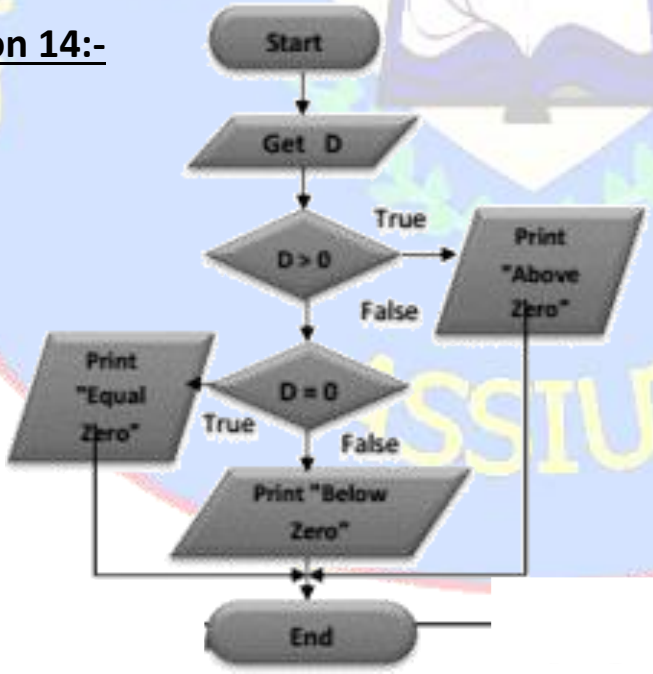
Question 12:-



Question 13:-



Question 14:-



Question 15:-

1- The purpose of the flowchart is printing the numbers from 4 to 7.

2- The repetition statement is Print N .

3- The expression N=N+1 means increasing the value of the variable "N" by 1

4- The result which will be printed is 4,5,6,7.