ANSWER KEY

Touchpad PRIME Ver 2.0
Class-7

1. Number System

a. 98 b. 1188 c. 731

Rapid Fire

1. a. (ii) b. (i) c. (ii) d. (i)

2. a. T b. T c. T d. T e. T

Evaluation Time

1. a. 0 b. 2 c. decimal number
d. 10 e. 8 f, binary

2. a. The octal number system is used as a shorthand representation of long binary numbers.
b. 4 bits make 1 nibble.
c. Base of a number system represents the total number of digits in a number system.

3. a. A Number System is simply a method of counting. There are many number systems in existence. The digital computer represents all kinds of data and information like audio, graphics, video, text and numbers in binary form. The total number of digits used in a number system is called its base or radix.

b. To convert a decimal number into a binary number, follow these steps:

Step 1: Divide the decimal number by 2 (the base of the binary number system).

Step 2: Note down the quotient and the remainder.

Step 3: Divide the quotient obtained again by 2 and note down the resulting quotient and remainder.

Step 4: Repeat the procedure till you reach a quotient less than 2.

IMPRINT 1

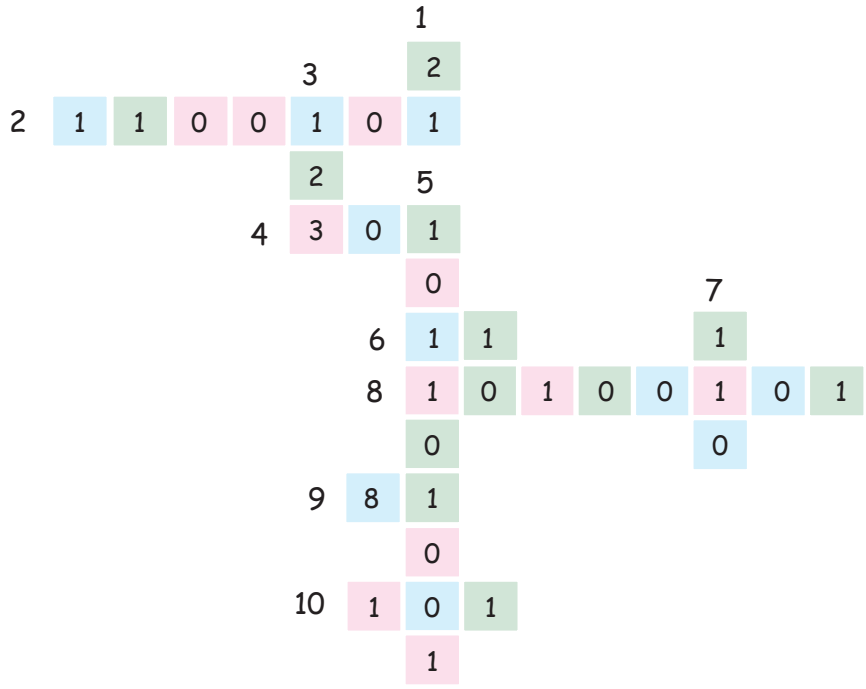
Step 5: List the last quotient and all the remainders (moving from bottom to top). You will get your binary number.

c. In binary subtraction, binary number of lower value is subtracted from the binary number of higher value. The following table explains the subtraction of digit Y from digit X. If Y is greater than X, then 1 is borrowed from the next position. When the binary digit 0 borrows 1 from the next most significant digit, it becomes 10.

4. a. 011001

b. (i) 01101 (ii) 10000 (iii) 01110 (iv) 011110 (v) 0101110

Activity Time



Group Task

Do yourself.

In The Lab

Do yourself.

2. Advance Features of Excel

Rapid Fire

1. a. (i) b. (i) c. (ii) d. (ii) e. (ii)

2. a. F b. T c. F d. T e. T

Evaluation Time

1. a. Column b. Custom sort c. Styles
d. Conditional Formatting e. Filters

2. a. Pie Chart is a circular chart divided into sectors where each sector shows the relative size of each value. It always shows only one data series.

b. Sorting data means to organise the data in ascending or descending order.

c. To remove filters, click on the filter command in the Data tab.

d. Filter command is used to unimportant data.

3. a. Pie Chart: It is a circular chart divided into sectors where each sector shows the relative size of each value. It always shows only one data series. It is useful when you want to emphasis on a significant element.

Bar Chart: The bar chart displays the data in the form of long rectangular rods also called bars. These bars can be placed horizontally on the chart area. It illustrates the comparisons amongst the individual items.

b. Sorting data refers to the process of organizing data in ascending or descending order. Whereas, filtering data refers to the remove or hide the unimportant data to emphasis on the important information.

c. Conditional formatting can be applied on the following criteria:

i. Highlight Cells Rules ii. Top/Bottom Rules iii. Data bars
iv. Color Scales v. Icon sets

d. To use Custom Sorting, follow these steps:

Step 1: Select the range of columns to be sorted.

Step 2: Click on the Sort & Filter command from the Editing group under Home tab.

Step 3: Click on the Custom Sort option.

Step 4: Check My data has headers checkbox, if the selected columns have a heading at the top.

Step 5: Click on the Sort by box and select the column header according to which you want to sort the data. In this case, we have selected Client Name header.

Step 6: Click on the Sort On box and select Cell Values option.

Step 7: Click on the Order box and select the A to Z or Z to A option. In This case, we have selected A to Z option.

Step 8: Click on the Add Level button at the top of the Sort dialog box to add another column to sort. In this case, we have added Amount Billed column.

Step 9: Click on the OK button.

Activity Time

1. a. Pie-chart b. Sorting

2.

G	R	I	D	L	I	N	E	S	P
D	F	Q	R	K	S	I	E	O	L
F	U	C	H	A	R	T	S	R	E
I	S	H	T	R	E	Z	F	T	G
D	E	Y	C	N	D	X	S	I	E
O	S	W	L	A	L	I	D	N	N
F	I	L	T	E	R	I	N	G	D

Find Out

Do yourself.

In The Lab

Do yourself.

Periodic Assessment 1

(Based on chapters 1 & 2)

A. 1. The total number of digits used in a number system is called its base.

2. Hexadecimal number system consists of 16 digits from 0-9, A-F.

3. Conditional Formatting command is present under Home tab.

B. 1. It is usually used to display the data in the form of vertical bars.

2. It is a circular chart divided into sectors where each sector shows the relative size of each value.

3. It is used to display the quantitative magnitude of the data graphically.

4. The bar chart displays the data in the form of long rectangular rods also called bars.

5. They show correlations between two sets of values.

C. 1. Scientific 2. H

D. 1. b 2. c 3. a

3. Building on Animate CC

1. 3 2. frames 3. frames per second
4. symbol

Rapid Fire

1. a. (iii) b. (iii) c. (ii) d. (iii) e. (ii)

2. a. T b. T c. F d. T

Evaluation Time

1. a. Masking b. Layers c. Properties d. Break Apart

2. a. The movement of an object in-between the frames is called Tween.

b. i. Motion Tween ii. Shape Tween iii. Classic Tween

c. Classic Tween is used for transition purpose. Whereas, Motion Tween is used to create movement and size.

3. a. Layers are sheets on which you place your drawings, animations and objects. They allow you to keep the elements of the animation separate. These are similar to transparent sheets, stacked one on top of the other.

b. Perform the following steps to format text in Animate:

Step 1: Click on the Text Tool from the Tools panel.

Step 2: Under the Properties panel choose the font size, color, style, etc.

Step 3: Type the text "ANIMATE" on the stage.

We can individually split the text with the Break Apart option.

Step 4: Select the text with Selection Tool.

Step 5: Click on the Modify → Break Apart option from the menu bar.

Step 6: Select the individual character and change the color.

Activity Time

1. a. Break Apart b. Shape Tween

2.

A	S	T	B	T	C	L	D	E	C
F	H	I	G	W	H	A	I	O	L
M	A	M	J	E	K	Y	L	V	A
O	P	E	O	E	N	E	M	A	S
T	E	L	P	N	Q	R	R	L	S
I	S	I	T	U	V	I	G	H	I
O	J	N	K	F	L	M	N	G	C
N	W	E	X	E	C	B	A	Z	Y

Find Out

Do yourself.

In The Lab

Do yourself.

4. Conditional Statements in Small Basic

If (i < 21) Then Text Window. Write Line(i) EndIf

Rapid Fire

1. a. (i) b. (i) c. (i) d. (ii) e. (i)

2. a. T b. F c. T d. F e. F

Evaluation Time

1. a. nested if b. branching c. Goto d. Decision Making

2. a. The three formats of If statements in Small Basic are:

i. If .... Endif ii. If ....else iii. If .... Elseif

b. The syntax for if-Then statement is as follows:

IF <condition> THEN

Statements to be executed

ENDIF

The syntax for If-then-Else statement is as follows:

IF <condition> THEN

Statements to be executed

ELSE

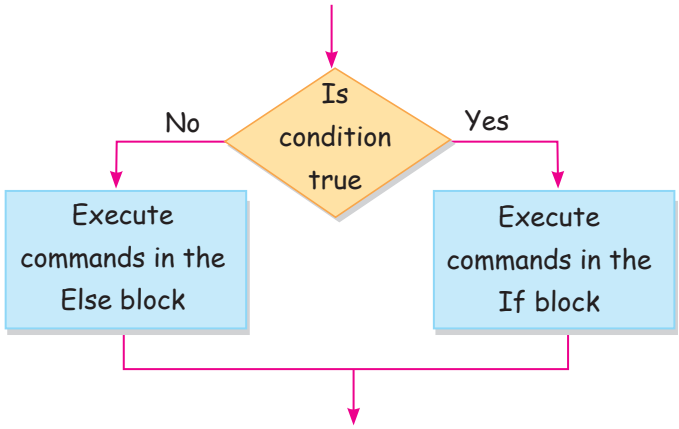
Statements to be executed

ENDIF

c. Goto statement is used to change the flow of program by letting the control to branch to a statement that appears earlier or later in the program.

d. If - Then statements are used to determine if a given condition is true or not. Whereas the if-then-else statement can be used when we have to take a decision based on the outcome of the condition.

3. a.



b. The branching statements allow the flow of execution to jump to a different part of the program. The common branching statements used within other control structure are Goto and Goto with Else statement.

Example:

Program 9.sb - C:\Users\deepak\Documents\Program 9.sb

```
1 i = 1
2 start:
3 TextWindow.WriteLine(i)
4 i = i + 1
5 If (i < 21) Then
6   Goto start
7 Else
8   TextWindow.WriteLine("You are out of the limit")
9 EndIf
```

Activity Time

1. If-Then-Else

2. a. You are old b. Nothing will print c. Three digit number

Find Out

Do yourself.

In The Lab

Do yourself.

Periodic Assessment 2

(Based on chapters 3 & 4)

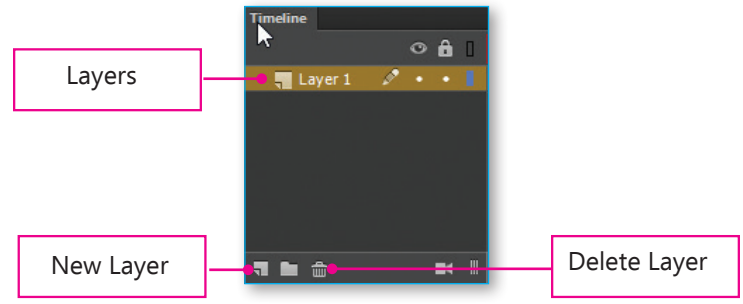
A. 1. Variable is not defined.

2. No error found.

B.

```
number = 1
START:
TextWindow.WriteLine(number)
number = number+1
IF(number<=20) Then
Goto START
EndIf
```

C.



D. 1. Masking in Animate is used to hide a selected part and display content instead on a layer.

2. Tweening refers to the types of animation in animate.

Test Sheet 1

(Based on chapters 1 to 4)

A. a. (i) b. (iii) c. (i) d. (i) e. (ii) f. (iii) g. (ii) h. (i)

B. a. T b. T c. T d. F e. T f. T

C. a. 8 b. 10 c. binary d. chart e. Plot area f. arrange

D. a. 4 bits make 1 nibble. b. 01101 c. 01101

d. Legend is a key which shows the meanings of symbols and colours used in the chart.

e. The movement of an object in-between the frames is called Tween.

E. a. The word binary comes from 'Bi-' meaning two. We see 'bi-' in words such as 'bicycle' (two wheels) or 'binocular' (two eyes). The binary numbers have the base of 2.

b. 011001

c. Layers are sheets on which you place your drawings, animations and objects. They allow you to keep the elements of the animation separate. These are similar to transparent sheets, stacked one on top of the other.

d. Steps to rename a layer:

Step 1: Double-click the name of the layer to rename it and type "background".

Step 2: Click outside the name box to save the new name.

5. Introduction to HTML

1. ?? 2. ?? 3. ??? 4. ???

Rapid Fire

1. a. (i) b. (iii) c. (ii) d. (iv) e. (ii)

Evaluation Time

1. a. markup b. <head> c. <b> d. <p> e. <sub>

2. a. HTML stands for Hypertext Markup Language. It is a markup language that describes the structure of the web page.

b. The tags that include both opening and closing tags are called Container Tags.

c. The heading tags are used to give a similar effect to your web page. These are container tags with a start tag and an end tag. HTML has six levels of headings such as <H1>, <H2>, <H3>, <H4>, <H5> and <H6>

3. a. The <HTML> tag tells the web browser that the text contained between <HTML> and </HTML> is a web page and can be viewed using a web browser.

The <BODY> tag tells the web browser that the text contained between <BODY> and </BODY> tags is to be shown on the web page.

b. The rules for writing HTML tags are:

- Container tags should always be closed properly.
- Values given to the attributes should be enclosed within the double quotes.
- Tag name should not contain spaces.
- There should be no spaces between < and > in a tag.
- Tags must be nested correctly.

c.
 tag is used when you want to start a new line, but do not want to start a new paragraph. This means that you want your text to come in next line without leaving a blank line in between. This tag forces a line break wherever you will place it.<HR> tag is used when you want to divide your web page into different sections. It is also used when you want to draw a line between two paragraphs.

Activity Time

1. a. <h3> b. <u> c. <bu> d. <html>

e. <p> f. <H1>

2.

Do yourself.

6. HTML—Lists and Tables

1. T 2. T 3. F 4. T
5. T

Rapid Fire

1. a. (iii) b. (i) c. (iii) d. (iv) e. (i)

Evaluation Time

1. a. ordered list b. list item c. <UL> d. disc e. <CAPTION>

2. a. A list is a collection of related items.

b. Table represents data in the form of rows and columns.

c. Description list is used to create a bulleted list.

3. a. An ordered list is also called the numbered list. This type of list is used to display the items in a sequential manner. In HTML, the <OL> tag is used to create an ordered list. The <LI> tag is used to define an item in the list.

An unordered list is also called bulleted list. This type of list is generally used to display random items which never require to place in a sequential manner. The <UL>tag is used to define an unordered list. The <UL> tag has only TYPE attribute which describe the type of bullet style will appear with list items.

b. The following attributes are used to present a table efficiently:

1. BORDER 2. BORDERCOLOR 3. FRAMES 4. BGCOLOR

c. The ROWSPAN attribute applies when a single cell is extended for more than a single row, that is, the cell spans for 2 or more rows instead.

The COLSPAN attribute applies when a single cell is extended to more than a single column, that is, the cell spans for 2 or more columns.

Activity Time

1. a. a. <OL> tag b. <TABLE> tag

2.

D	I	Y	B	E	S	B	S	R	E	J
R	S	T	A	R	T	O	Y	F	D	B
F	D	Y	C	Q	A	R	O	E	H	C
G	O	P	K	W	R	D	K	D	I	D
H	N	E	G	R	E	E	J	C	O	R
J	B	O	R	D	E	R	H	O	R	F
I	O	O	O	B	G	C	O	L	O	R
R	T	N	U	F	T	O	G	S	W	G
U	W	E	N	S	U	L	D	P	S	I
D	W	I	D	T	H	O	Z	A	P	M
O	A	F	U	Z	E	R	C	N	A	J
P	N	G	I	R	I	F	B	E	N	G
Q	T	T	H	H	G	A	H	R	F	X

In The Lab

Do yourself.

Periodic Assessment 3

(Based on chapter 5 & 6)

A. 1. Empty tags contain only opening tag. They do not have closing tag. These tags do not enclose any data.

2. An attribute is a property that provides some additional information about a tag. It enhances the functionality of a tag. It always specified inside the opening tag.

B.

```
<th>Concentration</th>
</tr>
<tr>
<td>Nitrogen</td>
<td>78.084</td>
<td>780,840.00</td>
</tr>
<tr>
<td>Oxygen</td>
<td>20.986</td>
```

```
<td>209,460.00</td>
</tr>
<tr>
<td>Argon</td>
<td>0.934</td>
<td>9340.00</td>
</tr>
<tr>
<td>Carbon Dioxide</td>
<td>0.036</td>
<td>360</td>
</tr>
<tr>
<td>Neon</td>
<td>0.00182</td>
<td>18.2</td>
</tr>
<tr>
<td>Helium</td>
<td>0.000524</td>
<td>5.24</td>
</tr>
<tr>
<td>Krypton</td>
<td>0.000114</td>
<td>1.14</td>
</tr>
<tr>
<td>Hydrogen</td>
<td>0.00005</td>
<td>0.5</td>
</tr>
</table>
</body>
</html>
```

7. Introduction to Python

Warm Up!

1. F 2. F 3. T

Rapid Fire

1. a. (i) b. (iii) c. (iii) d. (iv) e. (iv)

2. a. T b. F c. F d. F

Evaluation Time

1. a. Guido Van Rossum, 1991 b. interactive, script c. variables

d. string e. letter, underscore

2. a. The input() function takes the user's input while a program executes.

b. A data type specifies the type of value a variable can contains.

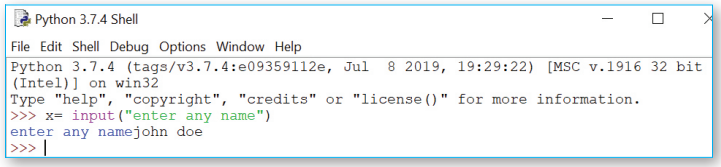
c. The print() function prints output to the standard output device, which is usually a monitor.

3. a. Each code line is executed and output is seen on the next line. Interactive mode gives output line by line. It is mainly used to test the code for errors.

We learnt in the interactive mode that Python automatically processes the expressions or inputs provided by the user and displays the result. In the script mode,

b. We can change string value to float by using floater.

c. The input() function allows user to change the value of any variable at the time of execution.



Activity Time

1. 2.0 **2.** 12 **3.** 4 **4.** 6 **5.** 10 20 30

In The Lab

Do yourself.

8. Cyber Safety

Rapid Fire

1. a. (ii) b. (iii) c. (iii) d. (i)

2. a. T b. F c. F d. T e. F

Evaluation Time

1. a. network b. Spamming c. hacking d. transaction e. patent

2. a. Hacking is the activity of identifying weaknesses in a computer system or a network to exploit the security to gain access to personal data.

b. There are three main types of Intellectual Property Rights: Copyright and Patent.

c. Try avoiding friend requests from unknown people on social media. If your parents/elders feel the need, they can also contact the local police station to lodge a complaint against the cyber bully.

3. a. When someone sends e-mails that appear genuine from a trusted e-mail ID but in reality they're not to be trusted.

For example, a user may receive an e-mail from a portal or social media platform where spelling of service provider or email ID has been slightly changed.

b. 1. Remember never to share personal details such as age, address, date of birth, etc. with unknown people on social media.

2. Restrict the access to your personal data on social media platforms. For example, only your friends must be able to see any pictures on Facebook.

3. Try avoiding friend requests from unknown people on social media.

c. Types of Online Transaction Frauds

1. Identify Theft: Sometimes, cybercriminals deliberately use someone else's identity to gain a financial advantage over someone else. Cybercriminals may also pose as someone else to obtain credit and other benefits in the other person's name.

2. Job Frauds: Cybercriminals portray incorrect details as an employer.

3. Banking Frauds: Some cybercriminals fraudulently obtain money from users for investment by posing as a bank or other financial institution.

d. Internet is also called as "the NET" or Network of Networks, means International Network.

Disadvantages of Internet:

1. Pornographic and Violent Pictures

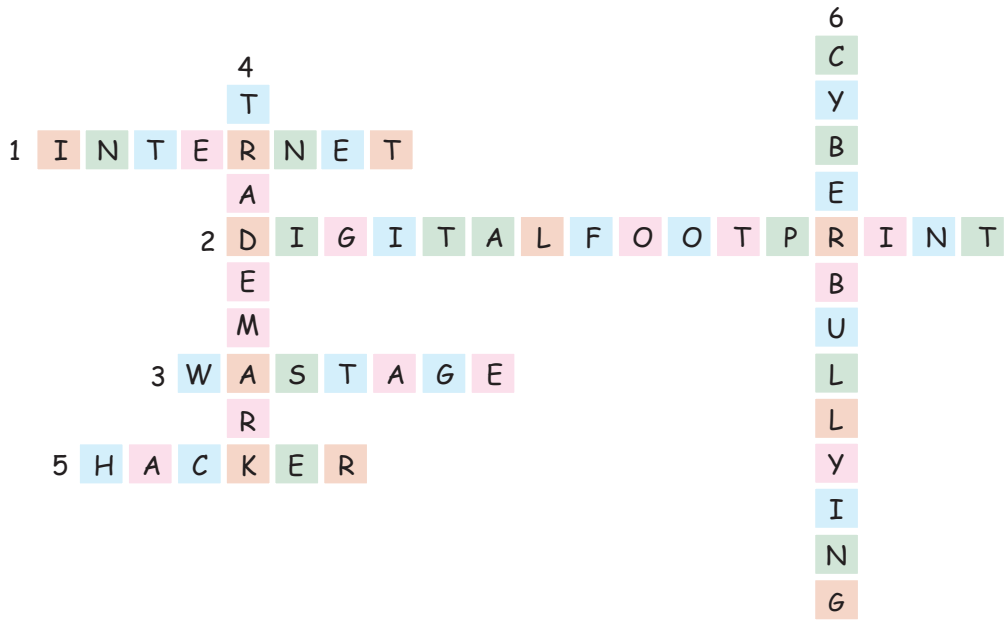
2. Wastage of Time

3. Virus and Spam Attacks

Activity Time

1. If you received e-mail that contain messages like "You win a prize money or expensive gifts" and "You are lucky winner of abroad tickets", then you should not click on that e-mail because it would be Spam.

2.



In The Lab

Do yourself.

9. Internet Services

Rapid Fire

1. a. (i) b. (i) c. (iv) d. (iv) e. (i)

2. a. T b. F c. F d. T e. F

Evaluation Time

1. a. cash on delivery b.communicate, information
c. Facebook d. blogger e. question

2. a. Facebook, Twitter and Instagram.

b. Net Banking and E-Wallet.

c. You are not allowed to post political content and poorly phrased questions.

d. (i) Your sensitive data might be at risk from hackers.

(ii) Some people might face issues like data loss.

3. a. Blog is a short form of WEBLOG, which refers to a website where new information about any topic is updated regularly. The latest posts appear first. The term Weblog was coined by an American blogger named Jorn Barger in 1997. It is like a journal where you write about your life and thoughts.

b. The key features of Skype are as follows:

- Skype translates the conversation in real-time if the person is talking in a different language.
- It is a safe way to have conversation with people without any interruption.
- You can share your screen to train someone.
- It has Live Subtitles option. This helps a hearing-impaired person to keep up with the call.

c. Website is a collection of static pages such as home page, contact page, profile page. On the other hand, blog contains both pages and posts but mostly posts. Websites usually don't change regularly as blogs do.

Activity Time

1. a. Cloud computing b. Facebook

2.

Do yourself.

Periodic Assessment 4

(Based on chapter 7 to 9)

A. 1. Variables are named locations we memory used to store data.

2. Keywords are reserved words that have some use in python.

3. Comments are notes written by the programmer for better readability.

4. Spamming refers to the process of sending unnecessary e-mails to people's e-mail address.

5. Blogging refers to the process of crating blogs about various topics.

B. 1. One drive 2. Phonepe 3. HDFC mobile

4. Facebook 5. eblogger

Test Sheet 2

(Based on chapters 5 to 9)

A. a. (i) b. (ii) c. (i) d. (iii) e. (ii)

f. (iv) g. (i) h. (iii) i. (ii) j. (iv)

B. a. T b. T c. T d. T

e. T f. T

C. a. string b. head c. d. script, interactive

e. Guido Van Rassum, 1991 f. Cash on delivery

D. a. HTML stands for Hypertext Markup Language. It is a markup language that describes the structure of the web page.

b. Table represents data in the form of rows and columns.

c. A Python identifier is a name used to identify a variable, function, class, module or other object. An identifier starts with a letter A to Z or a to z or an underscore (_) followed by zero or more letters, underscores and digits (0 to 9).

d. Hacking is the activity of identifying weaknesses in a computer system or a network to exploit the security to gain access to personal data.

e. A data type specifies the type of value a variable can contains.

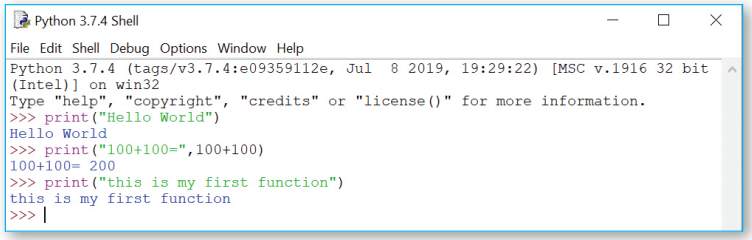
E. a.
 tag is used when you want to start a new line, but do not want to start a new paragraph. This means that you want your text to come in next line without leaving a blank line in between. This tag forces a line break wherever you will place it.<HR> tag is used when you

want to divide your web page into different sections. It is also used when you want to draw a line between two paragraphs.

b. The following attributes are used to present a table efficiently:

1. BORDER 2. BORDERCOLOR 3. FRAMES 4. BGCOLOR

c. The print( ) function is used to display messages defined by the user on the screen. The print( ) function can also be used to return the output of any expression after the processing. It can be used in both interactive and script modes.



d. 1. Remember never to share personal details such as age, address, date of birth, etc. with unknown people on social media.

2. Restrict the access to your personal data on social media platforms. For example, only your friends must be able to see any pictures on Facebook.

3. Try avoiding friend requests from unknown people on social media.

e. Perform the following steps to rename a layer:

Step 1: Double-click the name of the layer to rename it and type “background”.

Step 2: Click outside the name box to save the new name.