

Activity Answers

Lesson 1: VIRTUAL WORLD: PERILS TO PRIVACY

Exercise A:

1. Intelligence agencies
2. Good guys
3. automated systems
4. Surveillance
5. Meta-data.
6. Internet
7. Internet Service Provider.
8. Applications , money
9. Incognito mode
10. Governments

Exercise B:

1. True
2. False
3. False
4. True
5. False
6. True
7. True
8. False
9. False
10. True

Exercise C:

1. Metadata is the data that is automatically generated as you use the internet. It starts the moment you connect to the internet and tell your internet service provider (ISP) about your connection as we use internet like connection status, time and location
2. Internet traffic is the name given to all those services that generate meta-data for web sites.
3. World Wide Web (www) refers to the term which enlightens the world of internet, means the every single thing which is available over internet comes under www.
4. It is important because it avoids loitering around websites and services that are potentially helping the bad guys draw a blue print of your digital life.

Exercise D:

1. Telephone numbers
2. The time and length of phone calls
3. The internet protocol addresses (IP addresses) of computers from which messages are received or sent
4. Location of parties making phone calls
5. To and from email addresses on emails
6. Logs of visitors to chat rooms online
7. Status of chat sites – whether they are active and how many people are participating
8. Chat aliases or identifiers (the name a person uses in a chat room online)
9. Start and finish times of internet sessions

Exercise E:

1. Control your social network profiles with strict privacy settings. Do not keep your profiles public.
2. Do not distribute your email address to untrusted websites.
3. Control privacy settings of your web browser.
4. Make use of location or IP-switching services like VPNs.
5. Do not be a casual internet user. Post what is important and what you will not be ashamed of later.

Lesson 2: The Leading Trends in Personal Computing

Exercise A:

1. Cloud computing.
2. Remote storage
3. Loss
4. Heaviest
5. Google
6. Chrome OS.
7. Chromebook
8. Acer and Samsung
9. 100GB-1TB
10. Photo editor Microsoft Office
11. Printer
12. Performance
13. Windows
14. Voice Recognition
15. Signal errors

Exercise B:

1. True
2. False
3. True
4. True
5. False
6. False
7. True
8. True
9. False
10. True

Exercise C:

1. They get Smaller, cheaper computers because they need low power processor and small storage space.
2. They do not need to upgrade operating system
3. They do not need to upgrade applications
4. They need not back up data
5. They need not carry computer or data with them as data is accessible from anywhere in the world.
6. Theft or loss of computer does not mean loss of data
7. Even the lightest of machine can do heaviest of work because computing is done by servers in the cloud.

Exercise D:

1. It is a field of computer science that deals with system that can recognize spoken words.
2. A keyboard which you can carry around in your pocket is called Project Keyboard.
3. Google has introduced a cloud based operating system and a cloud based laptop computer. The operating system is called Chrome OS and the laptop is called Chromebook.
4. Gmail, Google calendar, Google Keep, Google Drive and Google Play video contents can be use in offline mode.

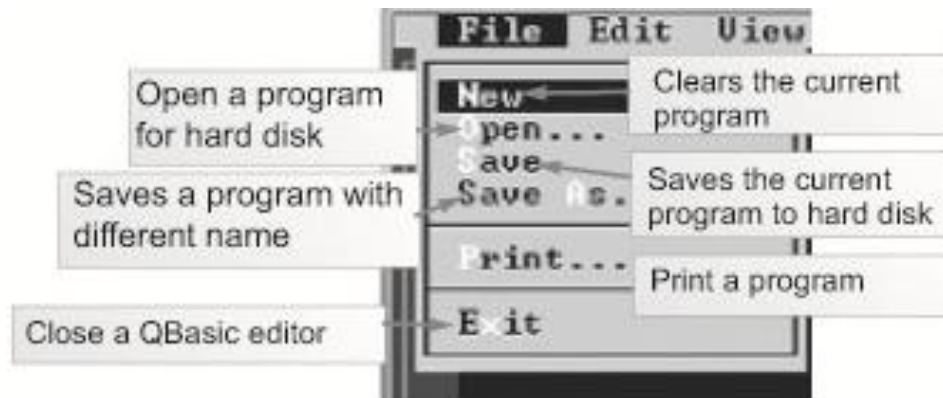
Lesson 3: Learning QBASIC (1)

Exercise A:

1. QuickBasic
2. Quotation marks
3. Restart and Continue
4. Shift+F5
5. CLS
6. (?)
7. INPUT
8. Variable
9. Constants
10. D:\

11. directory
12. IF THEN ELSE
13. Loop
14. Ctrl + Break

Exercise B:



Exercise C:

1. A QBASIC editor contains Title bar, Menu bar, Help tabs, Scroll bar, Current column and current line tabs, Status bar, Status of Caps lock and Num lock.
2. It is at the bottom of QBASIC editor. Any command given in this Window will be executed immediately.
3. Variables are names that store different value during program execution. If you want to store variable as a string data use dollar sign (\$).
4. C:\ "file name"
D:\ "file name"
5. Search tab let us find words in code.

Lesson 4: Learning QBASIC (2)

Exercise A:

1. One
2. ELSE IF
3. SELECT CASE
4. Variable Value
5. Infinite
6. hang
7. DO WHILE
8. FOR NEXT loop
9. Random
10. Data types
11. Dollar SIGN (\$)
12. Text
13. BEEP
14. Comments
15. Apostrophe

Exercise B:

1. Both are the numeric variables and store decimal numeric values.
Single-Precision: The symbol (!) is added at the end of numeric variables to get a decimal value of up to seven digits.
Double-Precision: Likewise, symbol (#) is added with numeric variables to get a decimal value of up to fifteen digits. They are called double precision variable.
2. Sub Routine and functions are used in all programming languages to use and reuse the codes.
3. Adding comments in a coding makes your code easy to read and understand because in lengthy coding, a programmer sometimes might not understand his/her own code.
4. Another useful option under Help tab is Contents. It is a help file, arranged as a book index. It contains useful options such as all keyboard shortcut keys.

Exercise C:

- a. 3
8
13
18
23
28
- b. Pakistan
- c. Pakistan
- d. Pakistan

Exercise D:

Generate numbers in descending order. (28, 23, 18, 13, 8, 3)

```
10   CLS
20   For A = 28 to 3 step - 5
30   Print A
40   Next A
50   End
```

Print your name five times.

```
10   CLS
20   For A = 1 to 5
30   Print "Write your name here"
40   Next A
50   End
```

Chap. 5: Understanding Dreamweaver

Exercise A:

- 1. Web development
- 2. three
- 3. Document Window.
- 4. Code view, Split view

5. Code view
6. Coding toolbar
7. Split View
8. Design View
9. Tag Selector
10. Pop-up menu
11. Internet Connection Speed
12. Internet speed
13. Panel Group
14. Insert panel images
15. CSS styling

Exercise B:

1. False
2. True
3. False
4. True
5. True
6. False
7. False
8. True
9. True
10. True
11. False
12. True
13. True
14. False
15. False

Exercise C:



Exercise D:

Code View

This window allows you to work with html code only. It has the option to validate the code and highlight the html errors. By clicking validating the document, it also highlights the tagging errors.

Design View

This view mode allows you direct editing in your webpage. It looks like a text editor, you can directly copy past your document in this area, and it will be automatically converted into a text document.

Split View

Sometimes there is a need to look both the code view and the design view. Split View lets you view the both code and design of webpage. It is recommended to use this view mode for developing websites.

Exercise E:

1. Collection of web pages, Domain name and Hosting.
2. It divided into three parts that are recent documents, create new section and create from sample.

Lesson 6: Working with Dreamweaver

Exercise A:

1. Remote folder
2. Elements items
3. Block level and Inline
4. Layout
5. Two
6. Table
7. <div>
8. Attributes
9. Content Area
10. Footer
11. Navigation
12. Header

Exercise B:

Cell Padding:

Cell Padding is the space between cell content and cell wall.

Cell spacing

Cell spacing is the thickness of the cell wall.

Border

Border is use to define thickness of border on a table.

Exercise C:

- Define a New site
- Click on the File menu
- Click New
- Slect the tamplate and click OK.
- Change the dummy text and pictures with your own.

Exercise D:

1. HTML document is composed of tags called elements that represent different items on page.
2. There are two different types of approaches used to achieve layouts in HTML.
 - a. Table layouts
 - b. CSS layout

Lesson 7: Virtual Reality

Exercise A:

1. Three Dimensional
2. immersion
3. telepresence
4. real surroundings.
5. personal computers
6. images
7. Care Automatic Virtual Environment
8. Expensive
9. Tracking systems
10. Input
11. Biosensors
12. Nerve activity
13. Science fiction
14. Interactive devices

Exercise B:

HDM

Many VER systems use Head Mounted Displays (HMDs), which are headsets that contain two monitors, one for each eye.

CAVE

A VRE systems that project images on the walls, floor and ceiling of a room is called Cave Automatic Virtual Environments (CAVE).

Exercise C :

1. With modern virtual reality systems, you can actually experience hang-gliding, race-car driving, tour the solar system or explore the human body firsthand without leaving home. Nowadays on which places virtual reality system is used?
2. The input devices that can be used include goggles, gloves, bodysuits, earphones, remotes, and even your computer mouse! While using these interactive devices the computer can control three of your senses to give you the sensation of being in a different world. The three senses that are most affected are your sight, sound, and sense of touch.

3. A biosensor can detect and interpret nerve and muscle activity. With a properly calibrated biosensor, a computer can interpret how a user is moving in physical space and translate that into the corresponding motions in virtual space.
4. We could experience flying, swimming, jumping, travelling and even eating or sleeping just by wearing some simulation kits.

Lesson 8: Quantum computers

Exercise A: Fill in the blanks.

1. Quantum
2. Matter and radiation
3. Silicone
4. 0 or 1
5. qubit
6. two qubit
7. -D-Wave One
8. D-Wave Two
9. Metal loops
10. Five times
11. Alan Turing
12. Quantum parallelism

Exercise B:

1. True
2. False
3. True
4. False
5. False
6. True
7. False

8. True
9. True
10. False
11. False
12. True

Exercise C:

1. The main advantage of a Quantum computer is the huge speed called Quantum speedup.
2. D-Wave One is the world's first commercially available quantum computer," operating on a 128-qubit chipset, priced approximately ten million US dollar (approximately one billion Pakistani rupees).
3. D-Wave Two is a 512-qubit quantum computer, which was launched as a production model in 2013. Its cost was 15 million US dollars.
4. Superposition theoretically ramping up the calculation speed exponentially.
5. Parallelism is the most powerful feature of a Quantum computer.

Lesson 9: Learning JavaScript (1)

1. Object-Oriented
2. Code
3. Printing
4. Elements
5. Additional
6. Outside
7. Values
8. Statement
9. Semicolon
10. End of the
11. Ctrl + shift + J
12. Bottom

Exercise B:

1. True
2. False
3. True
4. False
5. False
6. True
7. False
8. False
9. True
10. True
11. False
12. True

Exercise C:

Web developers use JavaScript primarily for the following reasons.

1. To change the content inside HTML and its attributes
2. To validate the forms of the website
3. To change the CSS Rules on the fly (while user is surfing the sit

Exercise D:

1. If the tags of HTML are not properly nested your document will not be properly validated by the browser and may fail to display some part of the HTML content.
2. A single piece of instruction is called a statement. A semicolon is used to end a statement.
3. More than one statement can be written in a single line separated by semicolon.

Exercise E:

Variable

Programming languages are used for working with values and data. Variables are used to store the values which are changed during program execution. All types of variables in JavaScript are written with var keyword.

Number: JavaScript has only one type of number. They can have both decimal and integers. They can contain upto 17 decimal places.

String: String (meaning your text) variable are always declared with inverted commas.

Array: Sometimes there is long list of variable. A list of variables is called Array. If the variables list is in bracket, JavaScript considers it an array.

Boolean: Boolean means true or false value. They are used to make decisions.

Objects: Objects are very important part of JavaScript because it is an Object-Oriented language. Objects are written with curly braces.

Lesson 10: Learning JavaScript (2)

Exercise A

1. JavaScript
2. Double slash (//)
3. Comment
4. Trial and error
5. Comment
6. /* and */
7. Ignored
8. Keywords
9. Round brackets
10. True or False
11. Equal sign
12. Variable

Exercise B:

1. True
2. False
3. False
4. True
5. False
6. True
7. True
8. False
9. True
10. False
11. True
12. False

Exercise C: Define the difference between (=), (==) &(===)

(=): Single equal sign assign a value to a variable. It is called an assignment operator.

(==): Two equal signs are used to check equality. It is called equality operator. It is used in conditional statement

(===): Three equal signs are used to match the type of data. It is called the identity operator.

Exercise D :

1. Function are block of codes that is used to perform some tasks. They are very important because help in reusing the codes. They cannot be written without round brackets. We can also create our own functions.
2. Object is a type of data that are composed of properties (values like variable) and methods (functions)
3. A full stop (.) in Java Script is used to access properties and methods in an object. Variables inside an object are called 'properties' and functions inside an object are called 'methods'.

Exercise E:

- | | |
|-------------------|---|
| 1. onclick="" : | When the user clicks an HTML element |
| 2. onmouseover="" | When mouse goes over an HTML element |
| 3. onmouseout="" | When mouse goes away from an HTML element |
| 4. onkeydown="" | When a key is pressed |
| 5. onkeypress="" | When a key is pressed |
| 6. onkeyup="" | When key is released |
| 7. onmousemove="" | When mouse is moved over an object |

Lesson 11: Editing Movies on the Computer

Exercise A:

1. Underlying functionality
2. Video Player.
3. Combining removing
4. Video editing.
5. Animations
6. Edit, Setting
7. Capture, Edit
8. Capture
9. Share
10. Editing
11. Storyboard view.
12. Five

Exercise B

1. False
2. True
3. False
4. True
5. False
6. False
7. True
8. False
9. True
10. False
11. False
12. True

Exercise C:



Exercise D:

Video track: This contains your videos. Drag and drop files here to add videos on this track.

Overlay track: Overlay track can hold photos, videos, or texts. Overlay track is a track that runs on (above) your main video.

Title track: Title and text played in video are displayed on this track.

Voice track: Drag and drop your audio files on this track to add a voice narrations.

Music track: Drag and drop your audio files on this track to add a background music.

Exercise E:

- The three modes of File menu are:
 - Capture:** It has the option to record your windows screen or to capture from video camera attached to your computer.
 - Edit:** This window is where you will spend most of you time editing your video.
 - Share:** When you will be done with editing your video this will let you save your file.
- The Sample list contains a large list of simple animation samples that you can apply to your video.
- Define the following contents

Video editing:

Combining shots from one or multiple recorded videos, removing their unwanted portions, and combining the shots into a one seamless whole is called video editing.

Audio editing:

Adding sound effects and background music is called Audio editing.

Visual effects, animation special effects:

These are real movies suff.

Lesson 12: Application for Social Interactions: Facebook

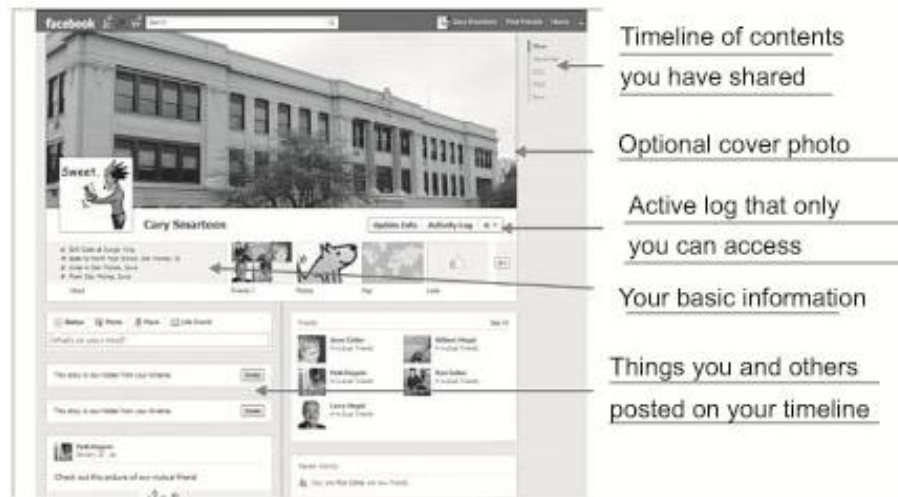
Exercise A:

1. Group
2. General Post Office (GPO)
3. 2004 Mark Zuckerberg.
4. Orkut
5. 70
6. Facebook
7. 30 billions
8. Timeline
9. Three
10. Chat area
11. Post
12. Clickjacking

Ex B: True and False

1. True
2. False
3. False
4. True
5. False
6. True
7. True
8. True
9. False
10. False
11. True
12. True

Exercise C:



Exercise D:

1. What used to be called your Facebook “profile” has been updated and is now called “timeline.” When you sign into your Facebook account, the very first page you see is your “Home Page”.
2. A phishing attack could be an email message with a link to what looks like the Facebook log-in page but is really an imposter page that records your username and password so the phishers, the data thieves, can use your account to send spam messages or malicious links to your Facebook friends.
3. A malicious program can spread via spam email and Facebook messages that encourage you to click on a link or download malicious software, or malware.
4. These are use links that look like Facebook posts. A clickjacking link redirects you to a site that plants malware on your device.
5. Whenever you post content, there is an opportunity to decide who can see it. For example, you can choose to share a particular post with just your Facebook friends, friends of friends, a particular list (such as Family or Close Friends), a specific friend or two or Only Me which means you’re not sharing it with anyone.

Lesson 13: The Expanding World Of E-Commerce**Exercise A:**

1. Products computer networks
2. Internet
3. ARPANET
4. 1981
5. Regular E-commerce
6. Shopping
7. 1981 business-to-business
8. Minitel France
9. 1984
10. Alibaba
11. 1998.
12. Payment

Exercise B:

1. True
2. False
3. True
4. True
5. False
6. True
7. False
8. False
9. True
10. False
11. True
12. True

Exercise C:

#	Website	Country	#	Website	Country
1	Taobao	China		Rakuten	Japan
2	Amazon	USA		Flipkart	India
3	eBay	USA		Etsy	USA
4	Alipay	China		Fiverr	USA
5	Alibaba	China		Snapdeal	India

Exercise D:

Components, Tools technologies of e-commerce

- **Mobile Commerce:** M-commerce is the use of cellular devices and related apps to help delivery of electronic commerce capabilities directly into the consumer's hand.
- **Electronic Funds Transfer:** Electronic funds transfer allows transfer of funds or money from one banking account to another through computers.
- **Internet Marketing:** Internet marketing, or online advertising, is the name given to all such activities meant to induce buyers into choosing E-Commerce as means of buying and selling.
- **Online Transaction Processing:** Online Transaction Processing (OLTP) refers to the information system and applications used by companies or banks to facilitate business transactions.
- **International Payment Systems:** It means you can trade in any part of the world that has an E-Commerce facility, and for payment you can use an intermediary online payment method like PayPal.

Exercise E:

Advantages of e commerce

- Anywhere / anytime shopping
- No travelling needed.
- Immediate delivery of virtual goods
- Compare before shopping.

Disadvantages of e commerce

E-commerce does not allow you to experience the product before purchases.

Delayed delivery of physical goods.

Fraud

Un-secure credit cards

Lesson 14: The Coming Revolution: Robotics

Exercise A:

1. Robotics
2. Humans
3. Robots
4. Karel Capek.
5. Slavic labor.
6. automata
7. wooden,
8. 206 AD
9. mechanical knight.
10. 1898 vessel.
11. William Grey Walter
12. artificial intelligence (AI) Neural Networks (NN).

Exercise B:

1. True
2. False
3. True
4. False
5. True
6. False
7. False
8. False
9. False
10. True
11. False
12. True

Exercise C:

1. **Electronic Motors:** electronic motors are those found in industrial settings. They can carry lighter loads from one place to another and can also perform rotational activities used in manufacturing factories.
2. **>Muscles or Actuators:** Actuators are like the "muscles" of a robot, the parts which convert stored energy into movement. By far the most popular actuators are electric motors that spin a wheel or gear, and linear actuators that control industrial robots in factories.

3. >Sensors: Sensors act like nerves and skin of the robots. They perform the necessary information processing for comprehension about a certain measurement of the environment, or internal components.
4. >Vision: It means, Robots can see through cameras that captures images in real time. The image data can take many forms, such as video sequences and views from cameras.
5. >Hands: Robots need to manipulate objects; pick up, modify, destroy, or otherwise have an effect. Thus the "hands" of a robot are often referred to as end effectors, while the "arm" is referred to as a manipulator.

Exercise D:

- 1) Artificial Intelligence: Artificial Intelligence is the science of programming machines to respond in an intelligent way. It is mainly achieved through programming the computer for every possible scenario.

Neural Network: Neural Network is the art and science of mimicking the human brain in computer circuitry. It is the basis of machine learning. Neural Network seeks to teach the machine through experience.

- 2) Capuchin Robots: Would have power to climb, walk and jump. In some situations, robots could also fly like insects, as in the case of recently developed drone-like robots.
- 3) In the future, we might develop robots that can think, act and evolve on their own.