

## **My Book of Computer – 7**

### **Activity Answers**

#### **Lesson 1: The Evil World of Hackers**

##### Exercise A:

1. Evil purpose.
2. Black hat hackers.
3. Good intention
4. Weak and vulnerable
5. Trojan horse
6. Self-replicating
7. Rootkits and Packet Analyzers
8. Password cracking
9. Keystroke loggers and phishing.
10. Ethical hackers
11. Vulnerability and port
12. Ethical hacking
13. Non-technical
14. White hats and black hats.
15. Ethical hacking

##### Exercise B:

1. Trojan Horse = Mask an object
2. Computer Worms = Propagate through computer networks
3. A computer virus = Self-replicating program
4. Viruses, Worms and Trojans =Hacking tools
5. Hacking done for good purpose = White hat hacking
6. A mixture of White and Black Hat = Grey hats

## Exercise C:

**1. Trojan Horse:**

A Trojan infection will look just like an ordinary computer application. Trojan horses help hackers to fool users and systems by masking an object or an application as if it were a usual part of your computer.

**2. Viruses:**

A computer virus is a self-replicating program. It works in the same way as a biological virus, spreading itself by inserting its copies into executable codes or documents.

**3. Worms:**

Computer worms are also self-replicating programs, but it spreads through computer networks without user intervention and does not need to attach itself to an existing programs.

**4. White Hat Hackers:**

Hacking done for good intents and purposes cure, is known as white hat hacking.

**5. Grey Hat Hacking:**

A grey hat hacker is a mixture of white and black hats. He interrupts computer systems and networks. If they are not working properly, he inform the administrators. For this service, he may often charge a fee.

**6. Hacktivists:**

A hacktivist is a hacker who utilizes technology to publicize a social, ideological, religious or political message and enforce ideas on websites.

**7. Black Hat Hacker:**

Hacking done for evils purpose is known as black hat hacker.

**8. Social Engineering:**

When Hackers simply get private information directly from their targets by disguising themselves as security experts or supervisors. This assistive hacking technique is regarded as social engineering.

Exercise D:

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

**Lesson 2: Encryption: Keeping the hackers at bay**

Exercise A:

1. Black hat
2. Secret code
3. Algorithm
4. Encryption
5. Symmetric and asymmetric
6. Same key
7. Public key
8. Windows
9. Office 2010
10. Password
11. Full disk
12. Bit locker
13. Internet application
14. Plain text                      cipher text
15. Virtual Private Network

Exercise B:

Encryption is the translation of data into a secret code. It is the most effective way to achieve data security. It is the process of encoding messages or information to such a way that only authorized parties can use it.

There are two main types of encryption

1. Symmetric – key ciphers use the same key, or secret, for encrypting and decrypting a message or file.
2. Asymmetric cryptography uses two different but mathematically linked keys, one public and one private.

Exercise C:

Authentication: the origin of a message can be verified.

Integrity: proof that the contents of message cannot of a message have not been changed since it was sent.

Non-repudiation: the sender of the message cannot deny sending the message.

Exercise D:

Right-click the icon of the folder or file you wish to encrypt, and select **properties**.

Under the **General** Tab click **Advanced**. A new screen will emerge.

Check the last option, **Encrypt contents to secure data**, and click **OK**.

Go back to file properties (from where you started) and click **Apply**.

### **Lesson 3: Keyboarding: your key to Computer Proficiency**

Exercise A:

1. Touch typing saves your time.
2. You are able to focus on your work.
3. You do not forget your ideas while you are typing.
4. Touch-typing give boost to your work and you can get more productive.
5. You get encouraged to use your computer because of touch-typing.
6. You get less tired while working long hours on computers.
7. You get appreciation from your friends and they will try to follow you.

## Exercise B:

1. You must not pull your head forward while typing.
2. You must not look upwards to monitor.
3. You must sit in apposition that your both hands could easily reach your keyboard and there is no resistance.
4. You should not sit away from the keyboard. Your elbows must be close to your body.
5. Your chair's backrest should support you back and you should feel relax and comfortable.
6. It is recommended to use external keyboard for laptops.

## Exercise C:

**Home Row: A, S, D, F and G                      H and J, K, L, :**

Left hand            use little, ring and middle fingers for A, S, and D respectively and index finger for F and G.

Right hand           use your little, ring and middle fingers for ;, L, and K and index finger for J and H.

**Top Row: Q, W, E, R and T                      Yand U, I, O, P**

Left hand            use little, ring and middle fingers for Q, W and E respectively and index finger for R and T.

Right hand           use your little, ring and middle fingers for P, O and I and index finger for U and Y.

**Bottom Row: Z, X, C, V and B                      N and M , Comma (,), full stop (.), Slash (/)**

Left hand            use your little, right and middle fingers for Z, X and C respectively and index finger for V and B.

Right hand           use your little, right and middle fingers for / (slash), . (full stop) and , (comma) respectively and index finger for M and N.

## Exercise D:

1. In touch typing you will not look at the keyboard, but rather you will look at the screen of your computer. Blind typing or touch-typing is the proper and most efficient method of typing.
2. To type capital letter there are two shift keys on the keyboard.

## **Lesson 4: Open Source Software**

### Exercise A:

1. Is available for modification
2. Free Software Foundation
3. Android
4. Open source Software
5. Closed software
6. To become a better programmer
7. Flexible and modifiable
8. Suit their need
9. Crowed finding and donations
10. To have basic HTML skills

### Exercise B:

#### **Advantages:**

##### **Excellent Learning Tool**

It helps the programmers to become better programmer because open source code is publicly accessible.

##### **Flexible and Modifiable**

Open Source projects are generally flexible and modifiable. Businesses, individuals and users can customize structure of open source software and applications to suit their needs.

##### **Economy of Use**

Open Source software is generally free, which means that overall costs of their usage are well below closed source or proprietary software.

##### **Real Time Development and Bug Fixes**

Open Source software evolves in real time. Using open source software also means you are not locked in to using a particular system.

Exercise C:

**Disadvantages:**

**Lack of support and funding**

Open source projects depend on crowd funding and donation. They cannot offer a standard level of support, flexibility and innovation.

**Bugs are not always fixed**

Bugs are not always fixed in open source software because nobody is particularly responsible for the codes.

**Not user friendly**

Open source software are not always user friendly.

**Potentially weaker security**

In terms of security, open source may allow hackers to know about the weaknesses or loopholes of the software more easily than closed-source software.

Exercise D:

1. Open source software is software whose source code is available for modification or enhancement by anyone and the software whose source code is not available or shared with anyone is called closed-source software.
2. Copyright is a legal right created by the law of a country that grants the creator of original work exclusive rights to its use and distribution, usually for a limited time, with the intention of enabling the creator to receive compensation for their intellectual effort.

**Lesson 5: Introduction to Programming**

Exercise A:

1. Instructions
2. Variable
3. Error
4. Programming language
5. High level
6. Low level

7. human
8. Executable
9. Machine and Assembly
10. Translation
11. Names
12. B – 0 and FORTRAN
13. Plate form
14. Web
15. Language translators
16. Decompiler
17. Interpreter
18. Slower
19. Interpreted and compiled
20. Run

#### Exercise B:

**Low-level language** may be referred to as a computer's native language. Programs and applications written in low-level language are directly executable on the computing hardware without any interpretation or translation.

**Machine language** is a low-level code interpreted and converted from high-level source code and understood only by the machine.

**Assembly language** is the most basic programming language available for any processor. It is not just a single language, but rather a group of languages.

#### Exercise C:

1. Designing, Writing Source code, Compiling, linking and debugging are the steps to create a program.
2. Language translators are the programs used to convert high level language to low level language or assembly language to machine language and vice versa.
3. Compiler translates whole program at a time and convert it into object code to run on the system, while interpreter translates only one statement of a program at a time into machine language and execute (run) it, then proceeds to the next statement.



4. Assembler is a computer program that translates programs written in assembly language into machine language.
5. Compiler that translates one programming language into other is called language translator. A compiler that converts machine language into high-level language is called decompiler.

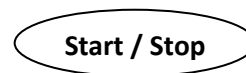
**Lesson 6: Learning the basics of programming**

Exercise A:

1. Variables and constants
2. Flow charts
3. Programming language
4. Windows
5. Line number
6. Type mismatch error
7. = (equal)
8. LET
9. Human
10. 65529

Exercise B:

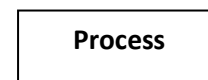
Terminal symbols



This symbol is used to show the starting point and termination points of a program.

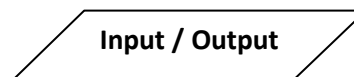
1. Process symbol

This symbol shows any kind of calculation or processes performed.



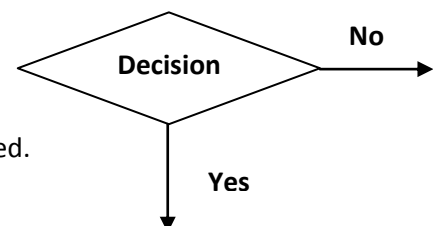
2. Input / Output symbol

Whenever your program use input from a user or show the output, we use this symbol.



3. Decision symbol

When you tell the computer to take decision this symbol is used.



## Exercise C:

- |                     |  |
|---------------------|--|
| 1. Auto             | automatically generate line numbers            |
| 2. Ctrl +Break      | close auto line generation                     |
| 3. F2               | RUN or execute a program                       |
| 4. Constant         | always remains the same value                  |
| 5. String           | character, data, words or text                 |
| 6. 1960s and 1970s  | BASIC became popular for mini computers        |
| 7. Altair BASIC     | developed by Bill Gates and Paul Allen in 1975 |
| 8. 1993 & Microsoft | launch of Visual Basic                         |
| 9. Syntax error     | not followed the rules of GW BASIC             |
| 10. Type mismatch   | a numeric value assigned to a string value     |

## Exercise D:

1. Basic stands for Beginners All purpose Symbolic Instruction Code. It was developed in 1964 by John G. Kemeny and Thomas E. Kurtz at Dartmouth College USA>
2. Spelling and grammar of a programming language is called syntax. Each programming language has its own syntax rules that computer understands.
3. Variables and constants are used to store data in computer programming language. Constants are used to store values which remain the same throughout the program. Variables are used to store different values during program execution.
4. Every programming language has certain reserve words that cannot be used as variables or constants. These reserve words are also known as keywords and are used to perform specific functions in a program.
5. Statements are the instructions given to the computer to perform a certain task. Statements always preceded by a line number or in indirect mode. Commands are the direct instruction. Commands are written without line number or in direct mode.

## Exercise E:

- NEW: IT clears the memory of all previous written program and you will be ready to start a new program.
- INPUT: allow a user to enter data and store into a variable
- PRINT: print the data given by the user.

END: it is used to inform the computer that coding is ended.

RUN: execute (RUN) a program.

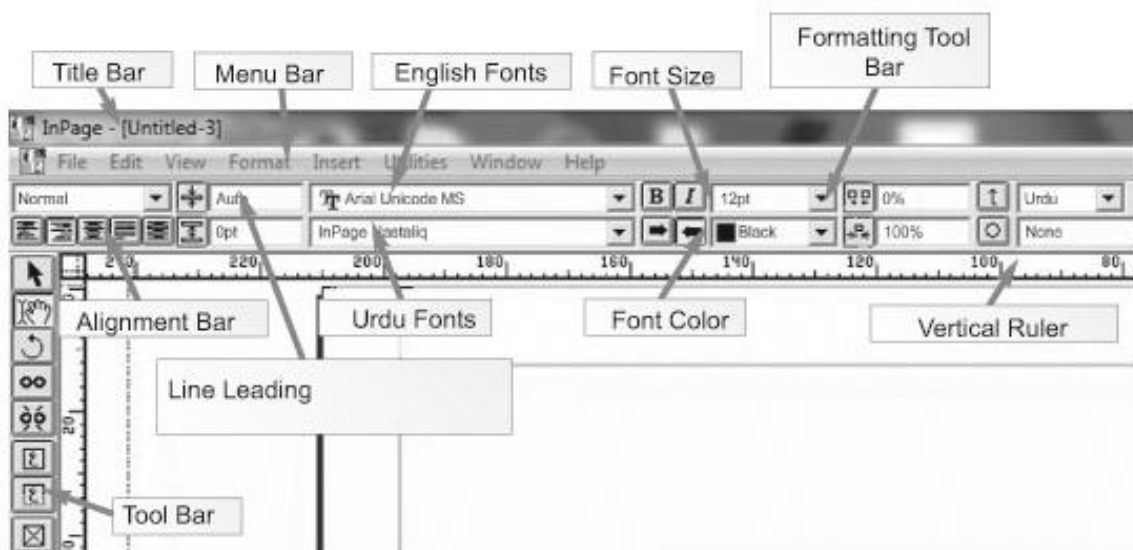
LIST: display the coding of the program

### Lesson 7: Urdu on Computer

#### Exercise A:

1. 55%
2. Urdu
3. Roman
4. Unicode
5. Data encoding
6. 1991
7. 2003
8. Language interface Pack
9. Roman English Arabic
10. Word processing
11. 1994
12. Desktop publishing
13. Boxes
14. Google
15. Tools

#### Exercise B:



Exercise C:

Go to **Control Panel**

Click **Region and language option**

Click **Keyboards and Language**

Click **Change Keyboard**

Click **Add**, select **Urdu**,

Press **Ok**.

This will install the default Urdu keyboard of Windows for use with Microsoft Word.

Exercise D:

1. You will have to manually download and install Urdu phonetic keyboard layout from third party website.
2. In InPage boxes allow you to easily make a layout suitable for your purpose. InPage offers separate boxes for text and picture. You can put different text in different boxes and different pictures in different boxes.

Exercise E:

1. Install Urdu as input language in Windows
2. Install Microsoft proofing tool.
3. Install Urdu keyboard layout
4. Install Nastaleeq font in Windows

## **Lesson 8: Going Pro with Power Point**

Exercise A:

1. Presentation
2. Online
3. Entrance
4. Equal space

5. Defined
6. Motion path
7. Review
8. Comments
9. Setup slide show
10. Object

Exercise B:

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

Exercise C:

Pen: used to draw and write anything on your slide.

Highlighter: used to draw attention to any point or part in presentation.

Eraser: use to remove the things done by the pen and highlighter

Exercise D:

Custom motion path:

- Select the object you want to move.
- Go to Motion Path, select the Custom Path, and move your mouse in any direction on the screen to set the path.
- Play the animation to move the object.

Insert Audio

- Go to the Insert tab
- Click Audio and Sound
- Select Audio on My PC

Start Slide Show

- Click the **Play Slide Show** button on the bottom of the PowerPoint window
- Or
- Click **From Beginning** on the **Slide Show** tab

**Lesson 9: Understanding Access**

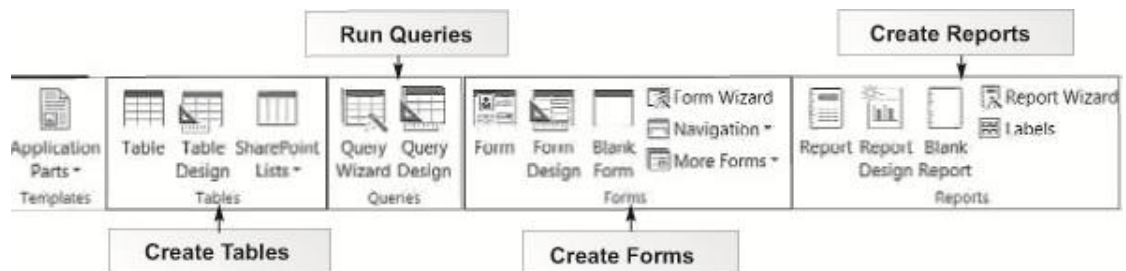
**Exercise A:**

1. Data base
2. Table
3. Column
4. Flat database
5. Multiple
6. Primary key
7. Oracle and SQL
8. Toggle view
9. Update
10. Objects

**Exercise B:**

1. A database is a collection of information that is organized so that it can easily be accessed, managed, and updated.
2. Database in Access work using objects. These are Tables, Queries, Forms and Reports.
3. Primary key is a unique value to identify each record in a table.  
If we refer the record of another table using Primary key, we will call it foreign Key.
4. Whenever all the data is contained in a single table, that database is called a flat database. In Relational database information is stored in multiple tables and all the tables are linked. This type of database is called Relational database.
5. Navigation pane is used to access all the objects in the database. This will show you the table, forms, queries and reports.

**Exercise C:**



1. Table group: This group is used to create and design tables
2. Forms group: This tab has a form-building wizard that will guide you with the process of creating forms.
3. Queries group: If you are not comfortable designing Queries, you can click Query Wizard to follow steps to create a search Query.
4. Create Reports: Use to create reports to view stored data in tables

#### Exercise D:

1. Table View modes:  
Tables have two view modes in Access. The Design View lets you create and edit tables and Datasheet View lets you view the data and enter values.
2. Form View modes:  
Forms Design View lets you create and edit your forms. Form View lets you enter the data in a form. Layout View lets you change the colour, font, theme and control of the form.
3. Queries View modes:  
Design View lets you create and edit queries. SQL View mode is used to write script. Datasheet View returns the results of the queries.
4. Reports View modes:  
Print View is used to print the report. Reports View is used to see the report. Layout View is used to change the colour, font, and theme of the report. Design View is used to edit the reports.

#### Exercise E:

1. The first and the main difference between them is that we use Access for relational database, while we use Excel to work only with flat data.
2. Searching, sorting, filtering, data entry, data management are easier in Access than in Excel.
3. Excel can contain small amount of data in each cell. Access can store large amount of data in each cell.
4. In Excel we directly enter data in cells, if we are working in Excel. Entering data like this is difficult in Access

5. We can create reports of data in Access but not in Excel.
6. Access provides tools so that multiple users can update data at the same time. Excel does not provide functionality to edit data from multiple locations.

### **Lesson 10: Working with Access**

#### Exercise A:

1. ID
2. Row
3. Type of data
4. Error free
5. Design View
6. Relationship
7. Three
8. Graphical
9. Infinity
10. Forms
11. Quick
12. Queries

#### Exercise B:

- Go to Start menu
- Click Microsoft Office
- Click Blank Database
- Name the database
- Click Create



## Exercise C:

S. No.	Data Type	What they are used for
1	Short Text	Text up to 255 characters long
2	Long Text	Text up to 65, 5 36 characters long
3	Number	Used only for numbers
4	Currency	For using numbers with currency signs
5	AutoNumber	An auto-increasing unique number used for primar key
6	Date / Time	For Dates or Time
7	Hyperlink	Contains links of webpage
8	Yes / No	Field for two words set, such as Yes / No, True / False, On / Off, etc.
9	Attachment	Used to attach one file
10	Calculate	Value created by functions and formula by getting data from other tables

## Exercise D:

1. To remove the data redundancy in a database relationship is used.
2. There are three type of relationships in a database:
  - a. One –to-one
  - b. one-to many
  - c. many-to-many
3. Access Relational Editor is used to display the relationship between tables in a graphical format.
4. Report in Access is a way to display your tables in a well-organize way.
5. Queries are used to retrieve and analyze the data. It also help you to define certain conditions on the tables.

**Lesson 11: Understanding HTML**

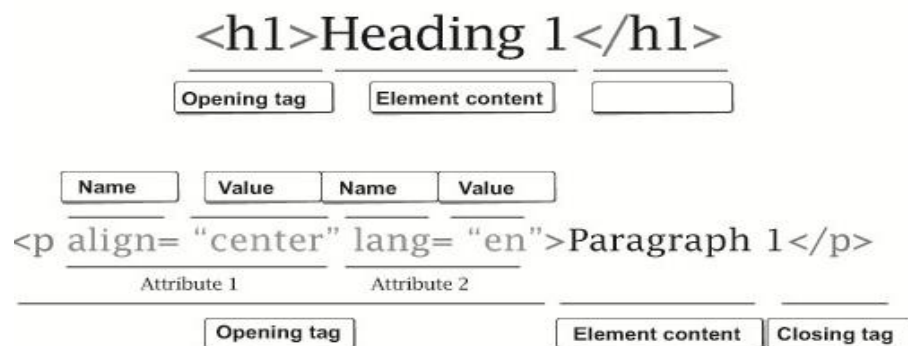
Exercise A:

1. Hyper Text Markup Language
2. Web
3. HTML
4. Commands
5. Text
6. Tags
7. Paired and unpaired
8. New line
9. <!DOCTYPE html/>
10. Information
11. Attributes
12. Own

Exercise B:

1. HTML stands for Hyper Text Markup Language. It is the authoring language used to create documents for the World Wide Web. It defines the structure and layout of a Web document.
2. HTML file is just like a plain text file with an extension of .html while plain text file has an extension of .txt.
3. Hypertext are the text which are linked to each other in a nonlinear fashion. Markup are commands which tell the computer what to do to a specific text.
4. The only difference between an opening and closing tag is that the closing tag has a forward slash (/) and opening tag has not. For example <h1> is an opening tag and </h1> is closing tag.
5. The purpose of DOCTYPE is to tell the browser the version of HTML mark-up the page is using.

Exercise C:



## Exercise D:

The whole of the html document is contained in <html> tags. Following are the basic elements of the HTML.

<head>

The head element contains the information about the page we are creating. This can contain the title and Meta information, which tells the search engines about the page. We have only one head element in the webpage.

<title>

The title element is used to display the name of the tab. It is nested inside head element.

<body>

Everything displayed inside the browser window is enclosed inside the body element.

**Lesson 12: Working with HTML**

## Exercise A:

1. Six
2. Paragraph
3. Italic
4. <em>
5. <ol>
6. <ul>
7. Spaces
8. &nbsp;

## Exercise B:

1. Spaces are necessary in HTML in order to make the code easy to read.
2. It means the different elements that is used to defining and formatting the text of webpage, like <i>, <b>, <u> for italic, bold and underline respectively.
3. <br /> is used to declare line break within paragraph.
4. For declaring number list in text of webpage we use <ol> (ordered list) element and for bullets we use <ul> (unordered list) element.

## Exercise C:

No.	Elements	Tags	Purpose
1	Heading	<h1> to <h6>	To display the heading in a webpage.
2	Paragraph	<p>	To declare a paragraph.
3	Breaks	 	To declare the line break within paragraph.
4	Emphasis	<em>	To show emphasis by italicizing the font.
5	Strong Importance	<strong>	To show strong importance by make the text bold.
6	Images	<img>	To display images.
7	Links	<a>	To link with other website.

## Exercise D:

## Result

The following are the most commonly used computer software.

1. Office Suite
2. Antivirus Software
3. Internet browsers

**Lesson 13: Popular Micro- Blogging Application: Twitter**

## Exercise A:

1. 2006
2. 140 characters
3. One
4. Follower friends
5. Tweet
6. Home page
7. 140
8. Favourites
9. Hashtags
10. #

## Exercise B:

Tweet:	A twitter message is known as Tweet.
Retweet:	Re-sharing to someone else's tweet.
Feed:	The stream of tweets you see on your homepage.
Handle:	Your username.
Mention (@):	A way to reference another user by his username in a tweet.
Direct Message (DM):	A private 140 characters message between two people.
Hashtag(#):	A way to denote a topic of conversation or participate in a larger linked discussion.

## Exercise C:

1. In the modern world of internet, small content such as short sentences, individual images, or video links are just like the pigeon post, and the websites providing them space and systems for this are called micro-blogs.
2. The sign-up screen requires you to fill fields like your username (the Twitter handle), Full Name (this does not necessarily need to be your actual name), email address and password. Once done with the initial sign-up screen, Twitter will help you fill up desirable details for your profile creation, step by step.
3. A way to denote a topic of conversation or participate in a larger linked discussion (e.g. #Pakistan, #Educationforall). A hashtag is a discovery tool that allows others to find your tweets, based on topics.

## Exercise D:

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

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

**Lesson 14: E-Medicine: A Boon for the Far-offs**

Exercise A:

1. E-medicine
2. Diagnosis
3. Smart textiles
4. Electromyography
5. Electroencephalography
6. Smart textile
7. EMRs
8. Electronic Medical Records
9. Details and history
10. Open source

Exercise B:

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

Exercise C:

1. Johnson & Johnson, Bayer and Novartis are making wearable gadgets and smart textiles like t-shirts, vests and jackets that have smart sensors to monitor patient's heartbeat, blood pressure and other body vital signs.
2. Wearable gadgets can measure a user's hear rate, respiration rate and skin temperature.
3. The data is stored and retrieved via cloud computing, in large, integrated and interconnected servers. This allows doctors and caregivers to access medical history of patients on the go.

**Lesson 15: The Coming Revolution: Internet of Things**

Exercise A:

1. Senses
2. Internet of things
3. 500
4. Quality
5. Thirsty
6. Light up and chimes
7. Vibration, temperature and pressure
8. Sensor
9. Radio Frequency Identifivation
10. Internet based

Exercise B:

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

10. True

Exercise C:

1. Sensors
2. Radio Frequency Identification system
3. Cloud computing and Storage

Exercise D:

**Flower Pot:**

The Internet-connected flower pot will tell you when its plant is thirsty and will then actually water it for you.

**Teapot:**

Users set schedules for when the teapot brew should begin, when to snooze and it also indicates when it's out of water.

**Light speakers:**

Streams music from a smartphone, while multiple lights work together to fill the room with sound.

**Smart bed:**

This bed knows when children are sleeping and when they're awake. The bed monitors their sleeping cycles , keep tracks a child's breathing and heart-rate throughout the night .

**Medicine bottle:**

The medicine bottle lights up and chimes to remind forgetful patients that it's medicine time.

**Door bell:**

Google Latitude doorbell, that chimes with a different ringtone when each family member is approaching the house