



**WORKSHEET 21**

**School: Ba Sangam College**  
**Subject: Computer Studies**

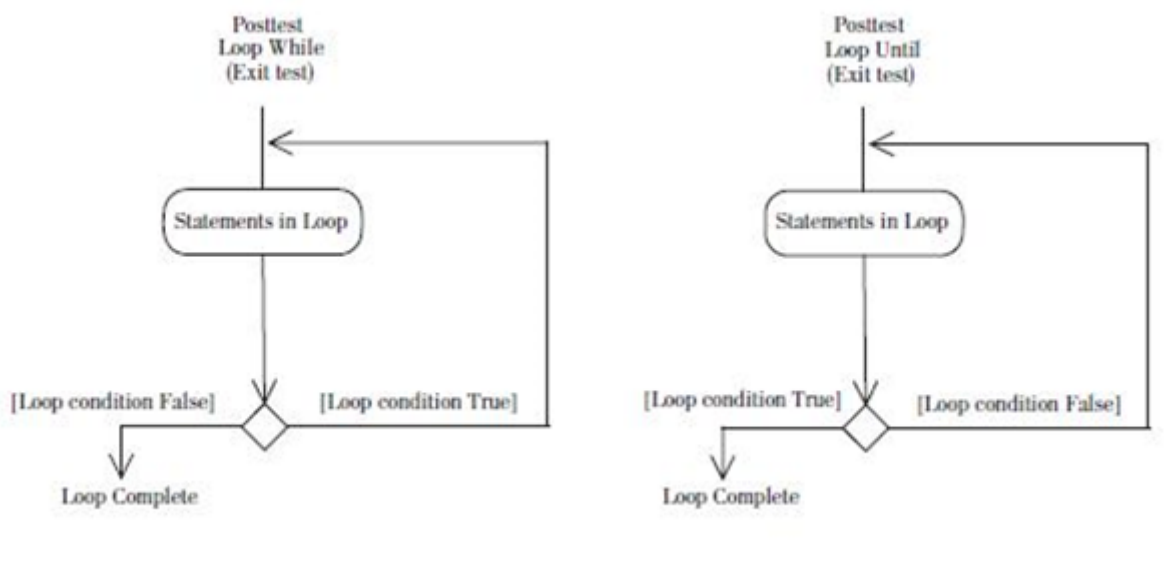
**Year / Level: 12**

**Name of Student: \_\_\_\_\_**

<b>Strand</b>	Application Package
<b>Sub strand</b>	Visual Basic .Net Programming (VB.Net)
<b>Content Learning Outcome</b>	Analyse and construct programs using programming skills learnt from Visual Basic.Net

**Posttest or exit test.**

In a posttest loop, the loop condition gets evaluated at the end of the loop cycle. Therefore, the body of the loop will get executed at least once, regardless of the condition.



**Post-test Do/Until Loop**

```
Dim intNum As Integer
intNum = 2 _initialise starting value

Do
    lblAnswer.Text = lblAnswer.Text & " " & intNum
    intNum = intNum + 2 _increment by 2 for even numbers
LoopUntil (intNum > 20) _ Condition
```

**Post-test Do/While Loop**

```
Dim intNum As Integer
intNum = 2 _initialise starting value

Do
    lblAnswer.Text = lblAnswer.Text & " " & intNum
    intNum = intNum + 2 _increment by 2 for even numbers
LoopWhile (intNum <= 20) _ Condition
```

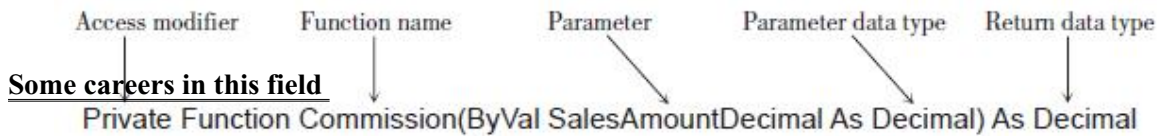
**Sub procedure** – performs actions

**Function procedure** – performs actions and returns a value (the return value)

**ByVal** sends a copy of the argument's value to the procedure so that the procedure cannot alter the original value.

**ByRef** sends a reference indicating where the value is stored in memory, allowing the called procedure to actually change the argument's original value.

**Procedure header for a function Header**



### Computer programmers

- ❖ Write, revise, test, debug, and maintain the programs that instruct computers how to carry out certain tasks.
- ❖ Programmers write these instructions in coding languages like Java or C++, which computers can then follow.
- ❖ The job of a programmer may involve a great deal of coding to very little coding in the case of some management positions

### Software designers

- ❖ Create software for an organization or its external clients and customer
- ❖ They often see a project from inception to completion, taking into consideration the needs of clients or stakeholders
- ❖ Software designers assess the requirements of the software, and ensure that they are met
- ❖ They may or may not perform the actual coding for the project

### Software developers

- ❖ Research, design, develop, and test software and systems found in technologies ranging from automobiles, to gaming systems, to life saving medical equipment.
- ❖ A software developer can be involved in many different aspects of a project ranging from coding, to design, to project management

### Security analysts

- ❖

### Activity

Draw a flowchart for the program segment given below. (10m)

```

10 Rem To Calculate Electricity Charge
20 Input "Enter Customer Name" ; N$
30 Input "Customer Postal Address" ; A$
40 Input "No. of units consumed" ; U
50 If U = 33 then
60 Total_Charge = U * 0.50
70 Print N$, A$, U, Total_Charge
80 Else If U > 33 then
90 Total_Charge = (U- 33)* 0.75 + (33 * 0.50)
100 Print N$, A$, U, Total_Charge
110 End

```

Safeguard and protect an organization's technology and systems from intrusion or harm.

- ❖ They monitor current systems, assess potential threats, and put measures in place to ensure that files are neither deliberately or accidentally changed, damaged, deleted or even stolen.

### Web/internet engineers

- ❖ Develop web pages and interfaces for an organization's external or internal websites.
- ❖ Responsibilities may include building web sites, internet applications, social media networks, and e-commerce applications through code.
- ❖ They may also include configuring web servers and network security, server-side or client-side scripting, web design and content development.

### Application developers

- ❖ Use programming languages and source code to create software that meets client requirements
- ❖ Developers may work with multiple programming languages and operating systems
- ❖ Application development involves the process, life cycle and creation of the software aimed at helping users complete a computer task or program
- ❖ Developers work closely with computer analysts and engineers in using languages such as Java, C++ or ORACLE to develop the necessary specifications for software
- ❖ Developers may also test, debug and improve generally faulty applications for clients

