



WORKSHEET 20

School: Ba Sangam College

Year / Level: 12

Subject: Computer Studies

Name of Student: _____

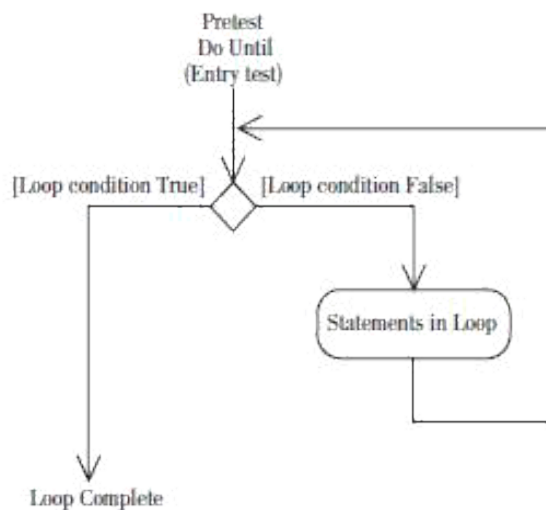
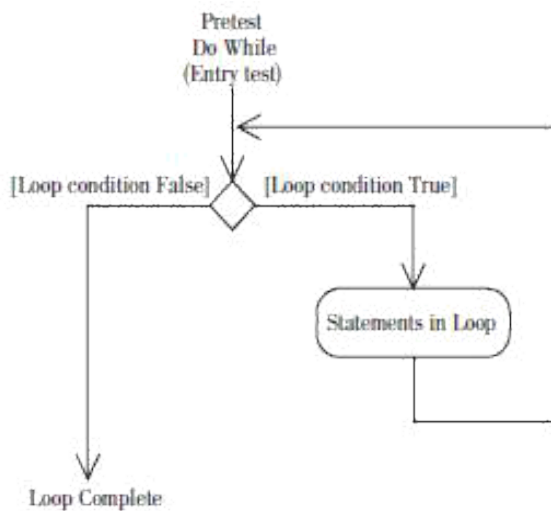
Strand	Application Package
Sub strand	Visual Basic .Net Programming (VB.Net)
Content Learning Outcome	Analyse and construct programs using programming skills learnt from Visual Basic.Net

Repetition Structures (FOR...NEXT Loop, DO Loops)

1) pretest or entry test

The statements inside the loop may never be executed if the terminating condition is True the first time it is tested.

In a pretest loop, the condition gets evaluated at the beginning of the loop cycle. Therefore, the body of the loop will not get executed if the condition does not hold the very first time.



Pretest Do/While Loop

```
Dim intNum As Integer
```

```
intNum = 2 _initialise starting value
```

```
DoWhile (intNum <= 20) _ Condition
```

```
lblAnswer.Text = lblAnswer.Text & " " & intNum _concatenate
```

```
answer intNum = intNum + 2 _increment by 2 for even numbers
```

Loop

For example, you want to output the message "Welcome" while the value of the variable x is less than 5. In such case, Do While loop will be used.

Pretest Do/Until Loop

```
Dim intNum As Integer
```

```
intNum = 2 _initialise starting value
```

```
DoUntil (intNum > 20) _ Condition
```

```
lblAnswer.Text = lblAnswer.Text & " " & intNum
```

```
intNum = intNum + 2 _increment by 2 for even numbers
```

Loop

Suppose you want to exit the block when the value of x becomes 3 in the above program, then you need to code like this:

```
<script type="text/vbscript">
Dim x
x=1
Do While x<5
document.write("Welcome.")
x=x+1
Loop
</script>
```

Output

Welcome.Welcome.Welcome.Welcome.

```
<script type="text/vbscript">
Dim x
x=1
Do Until x=5
If x=3 Then Exit Do
document.write("Welcome.")
x=x+1
Loop
</script>
```

Output

Welcome.Welcome.

Activity

1) Design a user interface that accepts two numbers from the user via different textboxes (txtNum1, txtNum2) and computes their sum. The results should be displayed in a label (lblAnswer) when the (btnsum) is clicked. Label the interface with appropriate names. (5m)

2) Study the program given below and answer the questions that follow.

```
10 Cls
20 Rem Simple loop program
30 For x = 1 to 8 step 2
40 Print x
50 Next x
60 End
```

i. Name the loop structure used. (1m)

ii. What will be the output for the above program? (2m)

iii. What is the purpose of the commands Cls and Rem? (2m)

iv. Which line number can be left out without affecting the program? (2m)

v. Draw a flow chart for the above program. (5m)