VISUAL BASIC REVISION TOUR AND CONTROL STRUCTURE

Q1. Change the following code using FOR loop without effecting the output

```
Dim count as integer
ans = 1
count = 20
DO
        ans = ans * count
        count = count -2
LOOP UNTIL count < = 10
Print ans
```

Ans.

```
Dim count as integer
ans = 1
for count=20 to 11 step -2
        ans = ans * count
next
Print ans
```

Q2 Find the errors from the following code segment and rewrite the corrected code.

```
Dim num=10, las Integer
I = I
Do While 1 < 5
        1 = 1 + 2
        If num > 15
            num = 0
        Else
            num = num — 3
        Endlf
End While
```

Ans.

```
Dim num=10 as Integer
I = 1
DO While I < 5
        I = I + 2
        If num > 15
              num = 0
        Else
              num = num — 3
        Endlf
LOOP
```

Q3. Rewrite the following code segment using Select Case statement :

```
If ch = “A” Then
        countA = countA + 1
Elself ch = “B” Then
        countB = countB + 1
Elself ch = “C” Then
        countC = countC + 1
Else
        countE = countE + 1
End If
```

Ans.

```
Select case ch
case “A”
        countA=countA+1
case “B”
        countB=countB+1
case “C”
        countC=countC+1
```

```
        case else
                countE=countE+1
        End Select
```
Q4 Write the output that the following code segment will generate :
```
        x=”Class”
        Print Mid (LTrim( “Computer Science” ),1,4)+”One”
        Print(7*4>8+3) And (3^2 < 6/2)
        Print InStr(“Computers”, “ut”)
```
Ans
```
        CompOne
        False
        5
```

Q5 Write the following code segment using For Loop :
```
        I=6
        x=I
        Do While I>=1
                x=x-2
                If x=0 Then
                        Print "Zero"
                End If
                Print I
                I=I-2
        Loop
```
Ans.
```
        1=6
        x=I
        for I=6 to 1 step -2
                x=x-2
                if x=0 Then
                        Print “Zero”
                End If
                Print I
        Next
```

Q6 Rewrite the following code using If Elself
```
        Select Case Code
        Case Is > 45
                Messagel = “Ersor”
        Case l0 To 20
                Message 1 = “Accounts”
        Case 21 To 30
                Message 1 = “Personnel”
        Case 31 To 45
                Message 1 = “EDP”
        Case Else
                Message 1 = “Access Denied”
        End Select
```
Ans
```
        If code>45 Then
                Message1=”Ersor”
        Else If code >= 10 And code <= 20 Then
                Message1=”Accounts”
        Else If code > 20 And code <= 30 Then
                Message1=”Personnel”
```

```
Else If code > 30 And code <= 45 Then
        Message1="EDP"
Else
        Message 1 = "Access Denied"
End If
```

Q7 Write the output that the following code segment will generate

```
Stringl = "Class XII"
String2 = "XI"
Print Stringl + String2
Print InStr (Stringl, String2)
Print Mid (LCase(Stringl), 6, 3 )
```

Ans.

```
Class XII XI
7
xi
```

Q8 How many times will the following loop execute?

```
I = 6
Do While I > = 0
        I =I-2
        Print I
Loop
```

Ans.

4 times

Q9. Differentiate between fixed and variable length string?

Ans.

Fixed length string :-

1. These string occupy same amount of memory for every data element that is stored.
2. Extra char from larger string are removed and smaller string are padded with spaces on the right

Variable length string:-

1. Memory occupied depends upon the information stored.
2. The variable length string can store string of any length without modification.

Q10. what is control array.? What is it's utility?

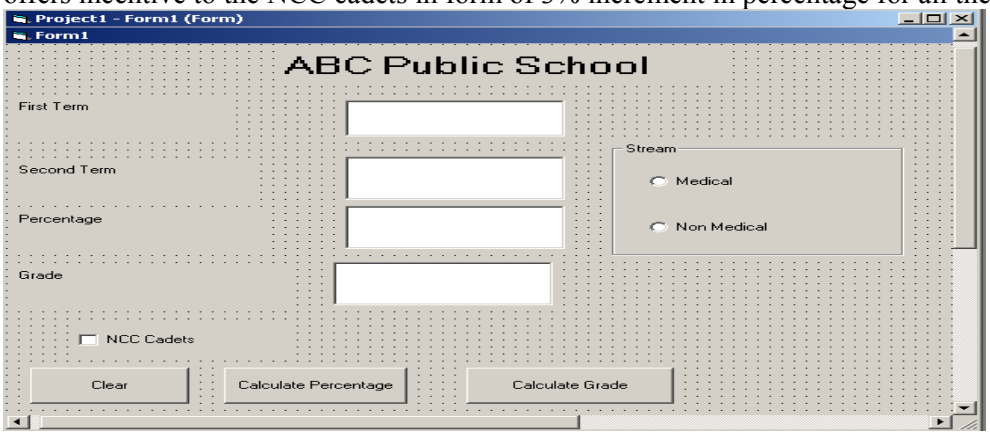
Ans.

A control array is a group of control that share the same name and type. A control array has at least one element and can grow up to 32767 elements.

Use of control array:-

1. control array use fewer resources than multiple control on same type.
2. code can be shared among the elements of a control array.

Q 11. Mr. amit works in abc public school as a programmer. He is required to develop a student record. The school offers two different streams medical and non-medical with different grading criteria. The school also offers incentive to the NCC cadets in form of 3% increment in percentage for all the NCC cadets



(a) write command to disable the textboxes txtPercentage and txtGrades

Ans.
```
Private Sub Form_Load()
    txtPercentage.Enabled = False
    txtGrades.Enabled = False
End Sub
```

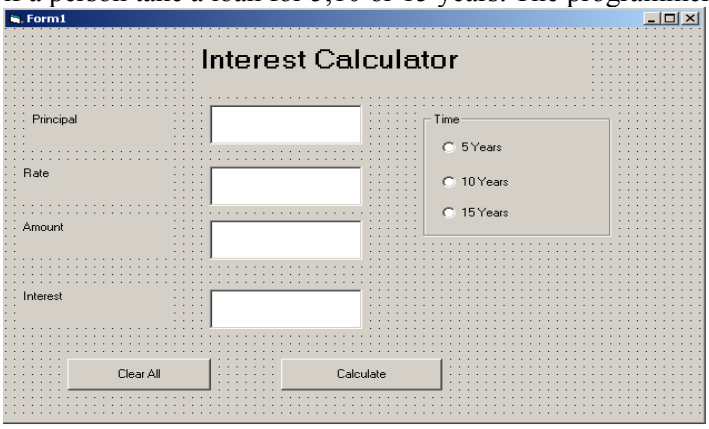
(b)write the code for cmdClear Command Button to clear all the textboxes and checkbox

Ans.
```
Private Sub cmdClear_Click()
    txtFirstTerm.text = “”
    txtSecondTerm.text = “”
    txtPercentage.text = “”
    txtGrade.text = “”
    chkCadet.Value = vbUnchecked
End Sub
```

(c) write the code for cmdCalcPer to calculate the percentage after finding the total marks of the first term and second term. Also ensure that NCC cadets gets an increment of 3% in their percentage.

Ans.
```
Private Sub cmdCalcPer_Click()
    Total = Val(txtFirstTerm.Text) + val(txtSecondTerm.Text)
    Perc = Total/200*100
    If chkCadets.Vlaue = vbChecked
        Perc = Perc+3
    End If
    txtPercentage.Text=Perc
End Sub
```

Q12 Mr. Robet a financiers frequently need to calculate the interest and amount due from his client. He asks his software programmer to design an interest calculator which will calculate the compound interest and amount due if a person take a loan for 5,10 or 15 years. The programmer opts for VB to develop this.



a. write the code to disable the textboxes txtInterest and txtAmount in form load event of frmInterestCalc.

Ans.
```
Private Sub frmInterestCalc_Load()
    txtInterest.Enabled=Flase
    txtamount.Enabled=Flase
End Sub
```

b. Write the code for cmdClear command button to clear all textboxes and sel default choice in option button opt5Years. Also set focus to txtPrinciple.

Ans.
```
Private Sub cmdClear_Click()
        txtPrinciple.Text=””
```

```
            txtRate.Text=""
            txtAmount.Text=""
            txtInterest.Text=""
            opt5Years.value=True
            txtPrinciple.setFocus
    End Sub
```

c. write the code for the change event of textboxs txtPrinciple and txtRate to ensure that the user enters only numeric values.

Ans.

```
    Private Sub txtPrinciple_Change()
            If Not (IsNumeric(txtPrinciple.Text) Then
                Msgbox("enter numeric value")
                txtPrinciple.Text=""
                txtPrinciple.SetFocus
            End If
    End Sub

    Private Sub txtRate_Change()
            If Not (IsNumeric(txtRate.Text) Then
                Msgbox("enter numeric value")
                txtRate.Text=""
                txtRate.SetFocus
            End If
    End Sub
```