1. Work out the answers to these sums:
   a) 10 MOD 6 = 4
   b) 10 MOD 4 = 2
   c) 4 MOD 10 = 4
   d) 8 MOD 2 = 0

2. What are the 4 events we had to write code for in the ‘Number Game 1’ program?
   Form_Load
   cmdReset_Click
   cmdCompare_Click
   cmdHide_Click

3. What are comments used for?
   To explain code to the programmer or others who may read the code.

4. How are comments put into a program?
   By putting an apostrophe at the start of the line

5. Where should comments be put in a program?
   At the beginning of a section of code or wherever an explanation is helpful.

6. What is a BOOLEAN variable used for? What are its 2 possible values?
   To store a TRUE or FALSE value

7. How do we declare a BOOLEAN variable – give an example.
   The Declaration should be put in the General Section of Code.
   DIM Winner AS Boolean

8. Write simple assignment (1 line code) statements to:
   a. Disable a command button named cmdRain
      cmdRain.Enabled = False
   b. Enable a command button named cmdSnow
      cmdSnow.Enabled = True
   c. Make visible a text box named txtEarth
      txtEarth.Visible = True
   d. Make invisible a label named lblWeekend
      lblWeekend.Visible = False

9. List 5 other events that code can be written for (e.g. Double_Click).
   Change, keyPress, MouseUp, MouseMove, Load (see the Code interface for more examples)

10. Write code to generate a random integer between:
    a. 1 and 50
        Int(Rnd*50+1)
    b. 10 and 100
        Int(Rnd*100+10)
    c. –5 and +5
        Int(Rnd*10-5)

Extension Activity

There are many ways to solve this programming problem. The following ‘If_Then_ElseIf_Else_End If’ structure would assist in determining if the number displayed in the textbox ‘txtDisplay’ is in the given ranges.

```vbnet
If Val(txtDisplay.Text) < 11 Then 'its less than 11
    'display appropriate message
ElseIf Val(txtDisplay.Text) < 21 Then 'its greater than 10 and less than 21
    'display appropriate message
Else 'its greater than 20
    'display appropriate message
End If
```