**Programming Solutions**

**Programming Concept: (e.g. Nested IFs)**

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| **Q / TASK** | **Code** | **Console Output** | **Comments/Problems** |
| Program  Exam  Qs1 | Dim ans As Integer = 0  Dim col As Integer = 8  Dim bit As Integer  Do Until col < 1  Console.WriteLine("enter bit value(1 or 0): ")  bit = Console.ReadLine()  ans = ans + (col \* bit)  col = col / 2  Loop  Console.WriteLine("Decimal value is: {0}", ans)  Console.ReadLine()  1c :8+4+2+1= 15  1d : 31-15=16 more bit pattern |  |  |
| 2 Section B | Dim count1 As Integer  Dim count2 As Integer  Dim prime As String  Console.WriteLine("the first few prime number are: ")  For count1 = 2 To 50  count2 = 2  prime = "Yes"  Do While (count2 \* count2) <= count1  If (count1 Mod count2 = 0) Then  prime = "No"  End If  count2 += 1  Loop  If prime = "Yes" Then  Console.WriteLine(count1)  End If  Next  Console.ReadLine() |  |  |
| Program  Exam  Qs2 | Dim player1score As Integer = 0  Dim player2score As Integer = 0  Dim noOfGamesInMatch, NoOfGamesPlayed As Integer  Dim playeronewinsgame As Char  Console.WriteLine("how many games?")  noOfGamesInMatch = Console.ReadLine()  For NoOfGamesPlayed = 1 To noOfGamesInMatch  Console.Write("Did player 1 win the game (ENTER Y or N)? ")  playeronewinsgame = Console.ReadLine()  If playeronewinsgame = "Y" Then  player1score += 1  Else  player2score += 1  End If  Next  Console.WriteLine("player one score: {0}", player1score)  Console.WriteLine("player two score: {0}", player2score)  Console.ReadLine() |  |  |
| Exam Qs 3 | Dim newword, userwordguess As String  Console.WriteLine("the new word? ")  newword = Console.ReadLine()  Console.WriteLine("your guess? ")  userwordguess = Console.ReadLine()  If userwordguess = newword Then  Console.WriteLine("correct")  Else  Console.WriteLine("incorrect")  End If  Console.ReadLine() |  |  |
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Note: Please make sure you save this document as ‘**if\_solution\_yourname.doc’**