**Card Predict Code Mock 2014 Mark Scheme**

**Question 1**



**Question 2**







**Question 3**





**Question 4**

|  |  |
| --- | --- |
| Sub Main() Dim CurrentGuess As Char Dim CurrentFlip As Char Dim NumberOfCorrectGuesses As Integer Const NumberOfFlips As Integer = 5 Dim FlipSequnce As String = "XHTHTT" Do Console.WriteLine("Plaese Guess Heads (H) or Tails (T)") CurrentGuess = Console.ReadLine Console.WriteLine("Coin Fliping....") CurrentFlip = FlipSequnce(NumberOfCorrectGuesses) Console.WriteLine("The coin landed " & CurrentFlip) If CurrentGuess = CurrentFlip Then Console.WriteLine("welldone. Lets flip again.") If NumberOfCorrectGuesses = NumberOfFlips Then Console.WriteLine("Congratuations You completed the sequence. Game Over") End If NumberOfCorrectGuesses = NumberOfCorrectGuesses + 1 Else Console.WriteLine("sorry you guessed incorrectly. GAME OVER") End If Loop Until CurrentFlip <> CurrentGuess Or NumberOfCorrectGuesses = NumberOfFlips Console.WriteLine("you guessed " & NumberOfCorrectGuesses & "flips correctly") Console.ReadLine()End Sub | 3 marks for correct declaration of all variables with initialisation. -1 for each error down to 02 Marks for correct writeline statements A typos. -1 for each missed2 marks for nested if’s2 marks for loop with correct logic |

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3(MARKS)

**Question 5**

25 NoOfRecentScores (1 mark)

26 Choice, PlayerName (may be others?) (1 mark)

27 IsNextCardHigher (1 mark)

28 Name and Score (need both for mark) (1 mark)

29 2 (1 mark)

30 0 (1 mark)

31 Higher (1 mark)

32 (c) and (d) (must have both and no others) (1 mark)

33 Because the scope; of the two variables is different; //

Because they are both local variables; in different subroutines; (2 marks)

 (Total 10 marks)

**Question 6**

 Function IsNextCardHigher(ByVal LastCard As TCard, ByVal NextCard As TCard) As Boolean

 Dim Higher As Boolean

 Higher = False

 If NextCard.Rank > LastCard.Rank Then

 Higher = True

 ElseIf NextCard.Rank = LastCard.Rank And NextCard.Suit > LastCard.Suit Then

 Higher = True

 End If

 Return Higher

 End Function



**Option 2**

**ynyyn entered**

**score of 4 reached**



**YY enterd with score of 1**

**Question 7**

 Sub UpdateRecentScores(ByRef RecentScores() As TRecentScore, ByVal Score As Integer)

 Dim PlayerName As String

 Dim Count, highscorePosition As Integer

 Dim IsHighScore As Bo olean

 PlayerName = GetPlayerName()

 IsHighScore = False

 Count = 1

 While Not IsHighScore And Count <= NoOfRecentScores

 If RecentScores(Count).Score < Score Then

 IsHighScore = True

 highscorePosition = Count

 Else

 Count = Count + 1

 End If

 End While

 If IsHighScore Then

 For Count = NoOfRecentScores - 1 To highscorePosition Step -1

 RecentScores(Count - 1) = RecentScores(Count)

 Next

 Count = NoOfRecentScores

 End If

 RecentScores(highscorePosition).Name = PlayerName

 RecentScores(highscorePosition).Score = Score

 End Sub

Correctly Identifying a high score(3 Marks)
Placing High score in correct place ( 4Marks)
Moving other scores correctly (4 marks)
Working procedure (3 Marks)

Credit recent score untouched with attempt at a sort.

Award 1 marks for testing if a sound display of the described tests are shown, regardless of algorithm. If test are in order for 4 games 2 marks. +1Mark for fifth score working shown