

閱讀以下學習材料並完成空白的部分。

第 7A 章 結構 (Structure)

1. 常見陣列處理

Example 7-1

某城市某年的每月降雨量存貯於一名為`rainfall`的陣列內。

```
Dim month(12) As String
Dim rainfall(12) As Single
month(1) = "January"      : rainfall(1) = 28.5
month(2) = "February"    : rainfall(2) = 19.2
month(3) = "March"       : rainfall(3) = 51.5
month(4) = "April"       : rainfall(4) = 115.1
month(5) = "May"         : rainfall(5) = 209.7
month(6) = "June"        : rainfall(6) = 307.4
month(7) = "July"        : rainfall(7) = 233.8
month(8) = "August"      : rainfall(8) = 266
month(9) = "September"   : rainfall(9) = 196.1
month(10) = "October"    : rainfall(10) = 38.9
month(11) = "November"   : rainfall(11) = 24.7
month(12) = "December"   : rainfall(12) = 20.4
```

工作 1: 輸出某月的降雨量

輸出樣本

```
Which month ? 11
The rainfall of November is 24.7 mm
```

程式碼

```
Dim x As Integer
Console.Write("Which month ? ")
x = Console.ReadLine
Console.WriteLine _____
```

工作 2: 輸出每月的降雨量

輸出樣本

```
1 28.5
2 19.2
:
12 20.4
```

程式碼

工作 3: 輸出全年的總降雨量

輸出樣本

The total amount of rainfall in the year is 1511.3 mm

程式碼

```
Dim total As Single  
total = 0  
For _____  
    _____  
Next  
Console.WriteLine("The total amount of rainfall in the year is " & total &  
" mm")
```

工作 4: 輸出降雨量最高的月份

輸出樣本

The rainfall of June is the highest

程式碼

```
Dim max_month As Integer  
Dim max_rf As Single  
max_month = 1  
max_rf = rainfall(1)  
For x = 2 To 12  
    If _____ Then  
        max_month = x  
        max_rf = rainfall(x)  
    End If  
Next  
Console.WriteLine("The rainfall of " & month(max_month) & " is the highest")
```

工作 5: 輸出降雨量最低的月份

2. Structure

Example 7-2

除了 integer, single, double, string, Boolean 等數據類型外，Visual Basic 容許程式員為程式度身訂造一種名為 structure 的數據類型。不同數據類型的變量可組合在單一的 structure 內。structure 必須在子程序(sub-program)外定義。

```
Module Module1
    Structure student
        Dim name As String
        Dim score As Integer
    End Structure
    Sub Main()
        Dim st(5) As student
        Dim temp As student
        st(1).name = "Wong"      :      st(3).score = 67
        st(2).name = "Tsui"     :      st(1).score = 75
        st(2).name = "Chan"     :      st(2).score = 80
        st(4).name = "Law"      :      st(4).score = 92
        st(5).name = "Leung"    :      st(5).score = 88

        For x = 1 To 4
            If st(x).score < st(x + 1).score Then
                temp = st(x)
                st(x) = st(x + 1)
                st(x + 1) = temp
            End If
            ' 檢查點
        Next

        For x = 1 To 5
            Console.WriteLine(st(x).name & " " & st(x).score)
        Next
    End Sub
End Module
```

完成下表，寫出程式執行至檢查點時，以下變量的數值。

遍		St(1)	St(2)	St(3)	St(4)	St(5)
進入循環前	Name					
	Score					
1	Name					
	Score					
2	Name					
	Score					
3	Name					
	Score					
4	Name					
	Score					