SIT102 Introduction to Programming

Pass Task 8.1: Reading another language

Overview

Now that you have examined the programming concepts in one language, you should be able to apply that understanding to read the code from other programming languages.

Submission Details

Use the instructions on the following pages to answer some questions and work through the execution of some code written in a range of programming languages.

Submit the following files to OnTrack.

- A document with answers to the questions provided.

The focus here is on the idea that these language are all similar to what you have already learnt. You should be able to read these and work out what they do without needing to do any further learning about those languages.

Instructions

For each of the following program code snippets, read the code and sample data provided, and then answer the questions related to the program in the supplied answer sheet (which you can download from OnTrack).

Program 1 - Visual Basic

The following Visual Basic code performs a useful task with an array of Integer values.

```
Function ???? (data As Integer(), val As Integer) As Boolean
    Dim i As Integer

    For i = 0 To data.Length - 1
        If data(i) = val Then
            Return True
        End If
    End For
    Return False
End Function
```

Sample data 1:

`data`:

```
|----|----|----|----|----|
|  2 |  6 | -3 |  4 |  7 |
|----|----|----|----|----|
```

`val`:

```
5
```

Sample data 2:

`data`:

```
|----|----|----|----|----|
| -1 |  7 |  2 | -4 |  8 |
|----|----|----|----|----|
```

`val`:

```
2
```

Program 2 - Python

The following is a small python program.

```
def add(a, b):
    print "ADDING %d + %d" % (a, b)
    return a + b

def subtract(a, b):
    print "SUBTRACTING %d - %d" % (a, b)
    return a - b

print "Starting…"
age = add(32, 5)
height = subtract(78, 5)
print "Age: %d Height: %d" % (age, height)

fruit = ['bananas', "oranges", 'figs', "lemons"]
for f in fruit:
    print "I like %s" % f
print "My favourite fruit is %s" % fruit[3]
```

Program 3 - Swift

```
let individualScores = [55, 28, 108, 92, 14]
let bonusScore = 5
let baseScore = 2
var teamScore = 0

print("Checking score: \(individualScores)")

for score in individualScores
{
    print("Checking score \(score)")
    if score > 50 {
        teamScore += bonusScore
    } else {
        teamScore += baseScore
    }
}

print(teamScore)
```