

SIT102 – Introduction to Programming

Answers for 8.1P Reading another Language

Student Name: Ben Marriner

Student ID: 220253518

Program 1:

1. What kind of variable is **data** and **val**? Are they local, global, parameter, or array respectively? Also state their data type.

Data and val are both parameters. While they are both integers, data is an array of integers.

2. How about **i**? Is it a local, global variable, parameter, or arrays? Also indicate their data type as well.

I is a local variable that is an integer.

3. What kind of data will this function return?

This function will return a Boolean value.

4. What would be returned if the function was called with the data in **sample data 1**?

The function will return false because there is no value of 5 in the data array.

5. What would be returned if the function was called with the data in **sample data 2**?

The function will return true because a value of 2 can be found in the data array.

6. Give a suitable name for this function to show its objective.

does_value_exist. The aim of this function is to take in an array of integers and a singular integer value and determine whether that singular integer value exists within that array.

Program 2:

1. What will be output when the program is run?

Starting...
ADDING 32 + 5
Age: 37 Height: 73
I like bananas
I like oranges
I like figs
I like lemons
My favourite fruit is lemons

2. What kind of variables are the following? Local, global, parameter or array? In addition, state their types as well.

Identifier	Description
age	Global Integer
height	Global Integer
fruit	Global Array of Strings

Program 3:

1. What will the code output when the program is run?

Checking score: [55, 28, 108, 92, 14]
Checking score 55
Checking score 28
Checking score 108
Checking score 92
Checking score 14
19

2. What are individualScores, bonusScore, baseScore, and teamScore? Constant, local, global, parameter or array? In addition, state their types as well.

Identifier	Description
individualScores	Global Constant array of Integers
bonusScore	Global Constant Integer
baseScore	Global Constant Integer
teamScore	Global Integer

3. What do you think the difference is between the keywords **let** and **var**? Hint: have a look at how they are used in the code.

The difference between let and var in the swift language is that let is used to define a constant while var is used to define a variable. Both of these will have their data types determined automatically based on the value the programmer gives it.
