# 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.

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| Data and val are both parameters. While they are both integers, data is an array of integers. |
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1. How about **i**? Is it a local, global variable, parameter, or arrays? Also indicate their data type as well.

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| I is a local variable that is an integer. |
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1. What kind of data will this function return?

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| This function will return a Boolean value. |
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1. What would be returned if the function was called with the data in **sample data 1**?

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| The function will return false because there is no value of 5 in the data array. |
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1. What would be returned if the function was called with the data in **sample data 2**?

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| The function will return true because a value of 2 can be found in the data array. |
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1. Give a suitable name for this function to show its objective.

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| 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. |
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**Program 2:**

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

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| 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 |

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

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| --- | --- |
| 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?

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

1. 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 |

1. 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.

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| 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. |
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