# SIT102 – Introduction to Programming

## Answers for 8.1P Reading Another Language

Student Name:
Student ID:

**Program 1**:

1. What kind of variable is **data** and **val**? Local, global, parameter? Array? What type?
    - both data and val are parameters passed in the function when we call it. They are integer type variables and are also local variables and cannot be called outside this function.

2. What about **i**?
    - "I" is a local integer variable that controls the iteration of the loop and represents the values being iterated within the data array.

3. What kind of data will this function return?
    - It will return a Boolean value, either true or false. If the integer in" val" is found within the array of data[], it will then return a true value. If the integer inside the val is not found inside the data[] array, then it will return a false value and exit the loop.

4. What would be returned if the function was called with the data in **sample data 1**?
    - The false Boolean value.
5. What would be returned if the function was called with the data in **sample data 2**?
    - The true Boolean value.
6. What would be a good name for this function?
    - Find_val();

**Program 2:**

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

| Starting … |
|---|
| ADDING 30 + 5 |
| SUBTRACTING 78 - 4 |
| Age: 35    Height: 74 |
| I like bananas |
| I like oranges |
| I like figs |
| I like lemons |
| My favorite fruit is lemons |

2. What kind of variables are the following? Local, global, parameter? Array? Type?

| Identifier | Description |
|---|---|
| age | Local integer variable |
| height | Local integer variable |
| fruit | A dynamic array with a local string variable |

**Program 3:**

1. What will the code output when run?

| Checking score: [57, 26, 107, 92, 15] |
|---|
| Checking score 57 |
| Checking score 26 |
| Checking score 107 |
| Checking score 92 |
| Checking score 15 |
| |
| **19** |
| |

2. What are individualScores, bonusScore, baseScore, and teamScore? Constant, variable? Local, global, parameter? Array? What type?

| Identifier | Description |
|---|---|
| **individualScores** | constant array, local integer variable |
| **bonusScore** | Constant local integer |
| **baseScore** | Constant local integer |
| **teamScore** | Local variable variable |

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.
   - Let is used when a variable needs to be constant throughout the code.
   - Var is used when a variable can be changed within the code anytime.