

Answers to Questions from TT 6.1

Name:

Student ID:

Hand execution using a trace table

Demonstrate how the following code is executed in the computer.

```
1 def whatdoesthisfunctiondo?(data)
2   result := 0;
3   i = 0
4   while i < data.length
5     result := result + data[ i ];
6     i = i + 1
7   end
8   return result
9 end
```

Draw and complete a trace table for the following two sets of data and place the final result in the table below:

<i>data</i>	<i>Result</i>
[6, -3, 3, 8, 1]	
[2, 6, -2, 3]	

Once you have completed your trace tables (below) write the name you chose for the function above:

Place your trace tables below:

1. Table

For data set: [6, -3, 3, 8, 1]

Data	i	Result
6	0	6
-3	1	3
3	2	6
8	3	14
1	4	15

2. Result = 15

1. Table

For data set [2, 6, -2, 3]

Data	i	Result
2	0	2
6	1	8
-2	2	6
3	3	9

2. Result = 9

3. The name of the function should be `sum_of_array(data)`