

## Answers to Questions from TT 6.1

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### 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
```

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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]	15
[2, 6, -2, 3]	9

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

array\_addition()

Place your trace tables below:

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

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

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

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