Answers to Questions from TT 6.1

Name: Nguyen Thi Thanh Minh
Student ID: 104169617

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:

data	Result
[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:

- I think it should be named *algebraic_sum(data)*, because it sums up all the data values taking account of their signs (adds when the number is positive, and substracts when negative).

Place your trace tables below:

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

data.length	i	data[i]	result
5	0	6	0
	1	-3	6
	2	3	3
	3	8	6
	4	1	14
	5	nil	15

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

data.length	i	data[i]	result
4	0	2	0
	1	6	2
	2	-2	8
	3	3	6
	4	nil	9