

Answers to Questions from TT 7.2.1

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Hand execution using a trace table

Demonstrate how the following code is executed in the computer.

```
1 def whatshouldthisfunctionbecalled?(data, val)
2     i = 0
3     result = false
4     while i < data.length
5         if data[i] == val
6             result = true
7             return result
8         end
9         i = i + 1
10    end
11    return result
12 end
```

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

| <i>data</i> | <i>val</i> | <i>Result</i> |
|-------------------|------------|---------------|
| [2, 6, -4, 3, 7] | 3 | |
| [-2, 8, 2, -5, 9] | 6 | |

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

Place your trace tables below:

For data set: **data** = [2, 6, -4, 3, 7] **val** = 3

| data | result |
|------|--------|
| 2 | false |
| 6 | false |
| -4 | false |
| 3 | true |

For data set: **data** = [-2, 8, 2, -5, 9] **val** = 6

| data | result |
|------|--------|
| -2 | false |
| 8 | false |
| 2 | false |
| -5 | false |
| 9 | false |

Name of function: [is_value_present](#)