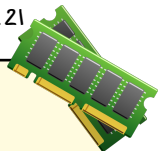


Finally 22.21 is stored in total

3

The value of total is read, it is 0 at this time. So the expression $total + data[2]$ has the value 22.21



4

Function: Sum

Returns: Double - The sum of the numbers from the data array

Parameters:

- 1: data (by const ref, array of Double) - values to sum
- 2: size (Integer) - the number of elements in data (C only)

Local Variables:

- *: i (Integer) - index of the current element in the array
- *: total (Double) - running total

Steps:

- 1: total is assigned 0
- 2: For i, starts at 0 and loops to the highest index of data
- 3: total is assigned $total + data[i]$
- 4: Return the result, total

Procedure: Main

Local Variables:

- *: my_data (array containing 3 Double values) - data array

Steps:

- 1: Call Populate Array (my_data, 3)
- 2: Output 'Sum is ', and Sum (my_data, 3)
- 3: ...

| Sum | |
|--------------|--------|
| data[]: | Ref1 |
| size: | 3 |
| i: | 1 |
| total: | 22.21 |
| result: | 92 |
| Instruction: | Step 3 |

| Main | |
|--------------|--------|
| my_data[]: | 10.0 |
| | -5 |
| | 17.21 |
| Instruction: | Step 2 |

2

1

Reads the i^{th} element of the data array - i is 2, so data[2]

data[2], skips 2 element to find its value - reading 17.21



```
Terminal — bash — 80x24
Enter value 1: Ten
Please enter a number.
Enter value 1: 10.0
Enter value 2: -5
Enter value 3: 17.21
```

