

The end of the for loop's body triggers the increment of its control variable i, so it now has the value 3

i is now out of range so the body will now be skipped

### Sum

data[]: 10.0  
size: 3  
i: 3  
total: 22.21  
result: 92  
Instruction: Step 2

### Main

my\_data[]: 10.0  
-5  
17.21  
Instruction: Step 2

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: ..

This is the end of the loop, so i must be incremented and control returns to step 2



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

