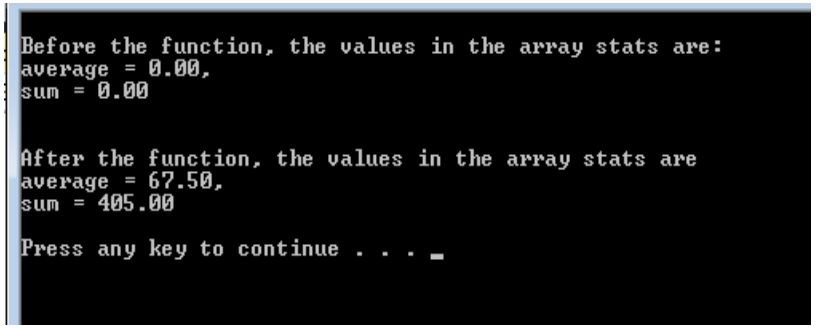
Practice Problem - Modify



- Declare two arrays:
- An array of test scores:

  scores=[70,80,60,45,95,55]

  Read this data from a file and use EOF!
- An empty array that will store the average and sum values calculated in a function

  stats=[0,0]
- A function will calculate the average and the sum of these values
- From the main, print the average and sum (the values in the stats array) before the function
- After the function, print the average and sum from the main

```c
#include <stdio.h>
#include <stdlib.h>

//Function
void function1(double[], double[], int);

int main()
{
    //Create pointer
    FILE *infile;
    infile = fopen("scores.txt", "r");

    //Read data and save into an array
    int i = 0, status = 1, count = 0;
    double scores[50];

    while (status != EOF)
    {
        status = fscanf(infile, "%lf", &scores[i]);
        if (status == EOF)
        {
            break;
        }
        i++;
        count++;
    }

    //Declare array and assign values
    double stats[2] = { 0, 0 };

    //Print values before function
    printf("\nBefore the function, the values in the array stats are: \naverage = %.2lf,    \nsum = %.2lf\n", stats[0], stats[1]);
    //Function call
    function1(stats, scores, count);
    //Print values after function
    printf("\n\nAfter the function, the values in the array stats are \naverage = %.2lf, \nsum = %.2lf\n\n", stats[0], stats[1]);


}
```

```c
void function1(double stats[], double scores[], int count)
{
    int j;
    double sum = 0.0;

    //Get sum
    for (j = 0; j<count; j = j + 1)
    {
        sum = sum + scores[j];

    }
    stats[0] = sum/count;
    stats[1] = sum;
}
```