Due: April 16, 11:59pm

Objective: Arrays, declarations, initialization, arrays in loops.

Submit the source code through Canvas. *yourname_Lab7.c* is the file name.

Use proper commenting at the beginning of your code with your name, lab number and date.

Each problem must be written as a separate function that is called in the main.

(Ten points deduction for not following any of the given formats)

1- (8 point) The following questions relate to an array called `numfrc`.
a) Define the size of the array to 25 by using a constant macro SIZE.
b) Declare the array to be of type double and initialize the elements to 0.
c) Assign the value of 6.666 to the 14th element of the array from beginning.
d) Refer to array element index 14 and assign the value of -6.666 to it.
e) Assign the value 1.667 to array element index nine.
f) Assign the value 3.333 to the seventh element of the array from beginning.
g) Print array elements index 14 and 9 with two digits of precision to the right of the decimal point, and show the output that is displayed on the screen.
h) Print all the elements of the array, using a for repetition statement. Assume the variable `i` has been defined as a counter control variable for the loop. Show the output as a table with index number and element value.

2- (6 point) Write statements to accomplish the following:
a) Initialize an array named `intable` to be an integer array and to have 4 rows and 4 columns. Assume the constant `SIZE` has been defined to be 4.
b) How many elements does this array contain? Use the `sizeof` operator and print the result.
c) Use a `for` loop to initialize each element of the array to the sum of its subscripts. Assume the integer variables `i` and `j` are defined as counter control variables.
d) Print the values of each element of array table using another loop.

3- (6 point) Find the error in the following program and re-write the corrected code.

```
#include <stdio.h>;
#define SIZE = 100;
int b[ 10 ] = { 0 }, i;
for ( i = 0; i <= 10; i++ ) {
b[ i ] = 1;
}
int a[ 2 ][ 2 ] = { { 1, 2, 3 }, { 3, 4 } };
a[ 1, 1 ] = 5;
```