Workshop 3, 4

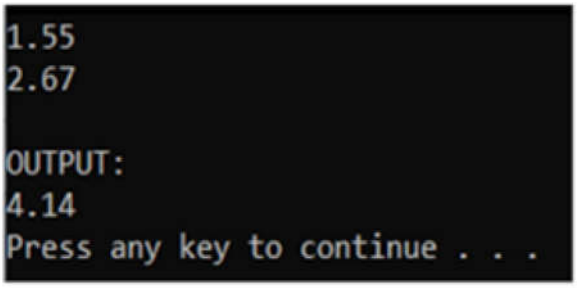
Q1.

Users are required to enter two numbers of type double a, b using the keyboard.

Here a and b are the side lengths of a rectangular.

Please print out the are of the rectangular with 2 decimal places.

For example, a = 1.55, b = 2.67, the output should be:



Q2.

Wrie a program to enter a number n (0 < n < 20) and calculate:

$$S(n) = x + x^2 + x^3 + \cdots + x^n$$

Print out the result with 4 decimal places.

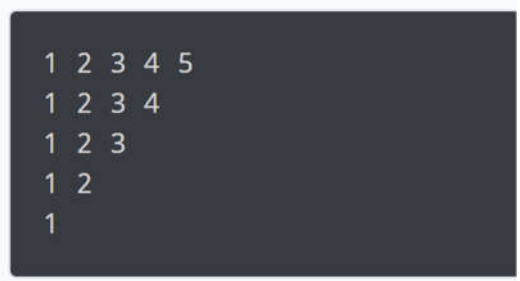
Q3.

Write a program to enter a number of rows (< 20) and print an inverted half pyramid of numbers.

For example:

The number of the rows = 5

The output should be:



Q4.

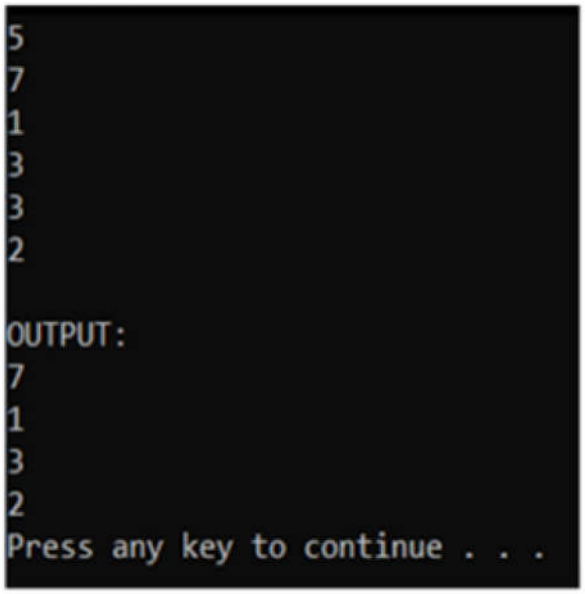
Write a program to enter a double array that may contain 50 elements, and enter a number x. Display the frequency of x in the array.

```
Enter N = 6
Enter 6 numbers: 2 2 4 2 7 9
Enter X = 2
3
```

Q5.

Your program allows user to enter an array of n integers, where n is entered by the user (n < 10). The program removes all duplicated odd numbers (keeps only the first occurrence of the numbers). Then the program prints the resultant list of numbers (after removing the duplicated ones). Between any two numbers, there is a newline character.

For example:


5
7
1
3
3
2
OUTPUT:
7
1
3
2
Press any key to continue . . .