

Java Exercise 2

1. Compute the area of an equilateral triangle. The formula is given below
(S is the length of any side of the triangle)

$$\frac{\sqrt{3}}{4}S^2$$

2. Print the following pattern. Get the number of lines to be printed from the user.

```
*  
**  
***  
****
```

3. Print the following pattern. Get the number of lines to be printed from the user.

```
1  
12  
123  
1234  
123  
12  
1
```

4. Sort an array of element using bubble sort
5. Remove duplicate elements from a sorted array [only one array should be used]
6. Reverse the contents inside an array[use only one array in the program]
7. Search for an element inside the array using linear search
8. Check if a given input matrix from a user is an identity matrix
9. Display the transpose of a given matrix
10. Display the sum of rows in a matrix
11. Display the addition result of two matrices