

```
1 import java.util.*;
2
3 public class Main {
4
5     public static void main(String[] args) throws Exce
6
7     Scanner sc = new Scanner(System.in);
8     System.out.println("Name:pavan kumar");
9     System.out.println("Sap id:51834695");
10    System.out.println("Enter the first string:");
11    String input = sc.nextLine();
12
13    System.out.println("Enter the second string:");
14    String rotation = sc.nextLine();
15
16    if (checkRotatation(input, rotation)) {
17        System.out.println(input + " and " + rotation
18                    + " are rotation of each other");
19    } else {
20        System.out.println("they are not rotation of
21    }
22
23    sc.close();
24}
25
26 public static boolean checkRotatation(String origi
27 if (original.length() != rotation.length()) {
28     return false;
29 }
30
31 String concatenated = original + original;
32
33 if (concatenated.indexOf(rotation) != -1) {
34     return true;
35 }
36
37 return false;
38 }
39 }
```

Name:pavan kumar
Sap id:51834695
Enter the first string:
xyz
Enter the second string:
zxy
xyz and zxy are rotation of each other
Process finished.

```
1 import java.util.Arrays;
2
3 class Main
4 {
5     public static void swap(int[] arr, int a, int b)
6     {
7         int temp = arr[a];
8         arr[a] = arr[b];
9         arr[b] = temp;
10    }
11
12    public static void bubbleSort(int[] arr, int x)
13    {
14        for (int a = 0; a < x - 1; a++) {
15            if (arr[a] > arr[a + 1]) {
16                swap(arr, a, a + 1);
17            }
18        }
19        if (x - 1 > 1) {
20            bubbleSort(arr, x - 1);
21        }
22    }
23
24    public static void main(String[] args)
25    {
26        int[] arr = { 10, 4, -4, 17, 3, 20, 1 };
27
28        bubbleSort(arr, arr.length);
29
30        System.out.println("Name:pavan kumar");
31        System.out.println ("Sap id:51834695");
32        System.out.println(Arrays.toString(arr));
33    }
34 }
```

Name:pavan kumar
Sap id:51834695
[-4, 1, 3, 4, 10, 17, 20]

Process finished.