

Question 2:

```
import java.util.*;
```

```
public class Main {
```

```
    public static void main(String[] args) throws Exception {
```

```
        Scanner sc = new Scanner(System.in);
```

```
        System.out.println("Program by Manasa\nJava1\nSAP ID:51834754");
```

```
        System.out.println("Enter the first string:");
```

```
        String input = sc.nextLine();
```

```
        System.out.println("Enter the second string:");
```

```
        String rotation = sc.nextLine();
```

```
        if (checkRotatation(input, rotation)) {
```

```
            System.out.println(input + " and " + rotation  
                                + " are rotation of each other");
```

```
        } else {
```

```
            System.out.println("they are not rotation of another");
```

```
        }
```

```
        sc.close();
```

```
    }
```

```
public static boolean checkRotatation(String original, String rotation) {  
    if (original.length() != rotation.length()) {  
        return false;  
    }  
  
    String concatenated = original + original;  
  
    if (concatenated.indexOf(rotation) != -1) {  
        return true;k  
    }  
  
    return false;  
}  
}
```

```

1 import java.util.*;
2
3 public class Main {
4
5     public static void main(String[] args) throws Exc
6
7         Scanner sc = new Scanner(System.in);
8         System.out.println("Program by Manasa\nJava1\nS
9         System.out.println("Enter the first string:");
10        String input = sc.nextLine();
11
12        System.out.println("Enter the second string:");
13        String rotation = sc.nextLine();
14
15        if (checkRotatation(input, rotation)) {
16            System.out.println(input + " and " + rotation
17                + " are rotation of each other");
18        } else {
19            System.out.println("they are not rotation of
20        }
21
22        sc.close();
23    }
24
25    public static boolean checkRotatation(String orig
26        if (original.length() != rotation.length()) {
27            return false;
28        }
29
30        String concatenated = original + original;
31
32        if (concatenated.indexOf(rotation) != -1) {
33            return true;
34        }

```

× Terminal

```

Program by Manasa
Java1
SAP ID:51834754
Enter the first string:
hi
Enter the second string:
hello
they are not rotation of another
Process finished.

```

Question 5:

```
import java.util.Arrays;
```

```
class Main
```

```
{
```

```
    public static void swap(int[] arr, int a, int b)
```

```
    {
```

```
        int temp = arr[a];
```

```
        arr[a] = arr[b];  
        arr[b] = temp;  
    }
```

```
public static void bubbleSort(int[] arr, int x)  
{  
    for (int a = 0; a < x - 1; a++) {  
        if (arr[a] > arr[a + 1]) {  
            swap(arr, a, a + 1);  
        }  
    }  
    if (x - 1 > 1) {  
        bubbleSort(arr, x - 1);  
    }  
}
```

```
public static void main(String[] args)  
{  
    int[] arr = { 4, 3, 8, 6, 1, 9, -7 };  
  
    bubbleSort(arr, arr.length);  
  
    System.out.println("Program by Manasa \nJava1\nSAP ID:51834754");  
    System.out.println(Arrays.toString(arr));  
}
```

}

```
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
25 public static void main(String[] args)
26 {
27     int[] arr = { 4, 3, 8, 6, 1, 9, -7 };
28
29     bubbleSort(arr, arr.length);
30
31     System.out.println("Program by Manasa \nJava");
32     System.out.println(Arrays.toString(arr));
33 }
```

× Terminal



```
Program by Manasa
Java1
SAP ID:51834754
[-7, 1, 3, 4, 6, 8, 9]

Process finished.
```

