

## 6.Program to Sort strings.

### Source Code:

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

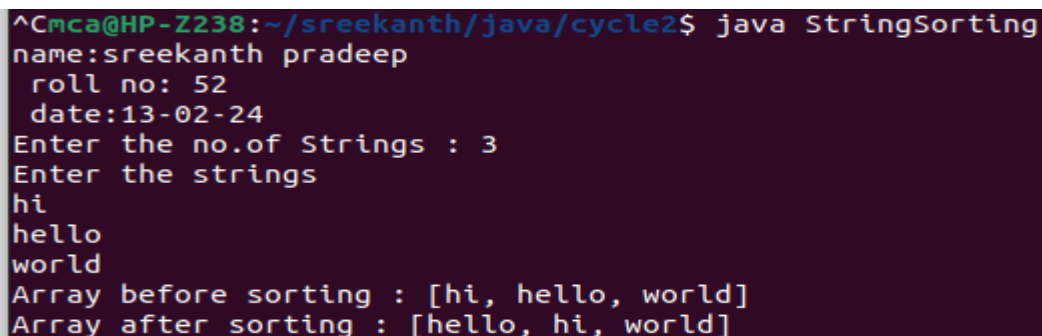
public class StringSorting{
    public static void main(String arg[]){
        Scanner scan = new Scanner(System.in);
        System.out.println("name:sreekanth pradeep\n roll no: 52\n date:13-02-24");

        System.out.print("Enter the no.of Strings : ");
        int n = scan.nextInt();
        System.out.println("Enter the strings");
        String[] str = new String[n];
        scan.nextLine();
        for(int i=0; i<n; i++){
            str[i] = scan.nextLine();
        }
        System.out.println("Array before sorting : " + Arrays.toString(str));

        for(int i=0; i<n-1; i++){
            for(int j=0; j<n-i-1; j++){
                if(str[j].compareTo(str[j+1]) > 0){
                    String temp = str[j];
                    str[j] = str[j+1];
                    str[j+1] = temp;
                }
            }
        }
        System.out.println("Array after sorting : " + Arrays.toString(str));

        scan.close();
    }
}
```

### Output:



```
^Cmca@HP-Z238:~/sreekanth/java/cycle2$ java StringSorting
name:sreekanth pradeep
roll no: 52
date:13-02-24
Enter the no.of Strings : 3
Enter the strings
hi
hello
world
Array before sorting : [hi, hello, world]
Array after sorting : [hello, hi, world]
```

## 7.Search an element in an array.

### Source Code:

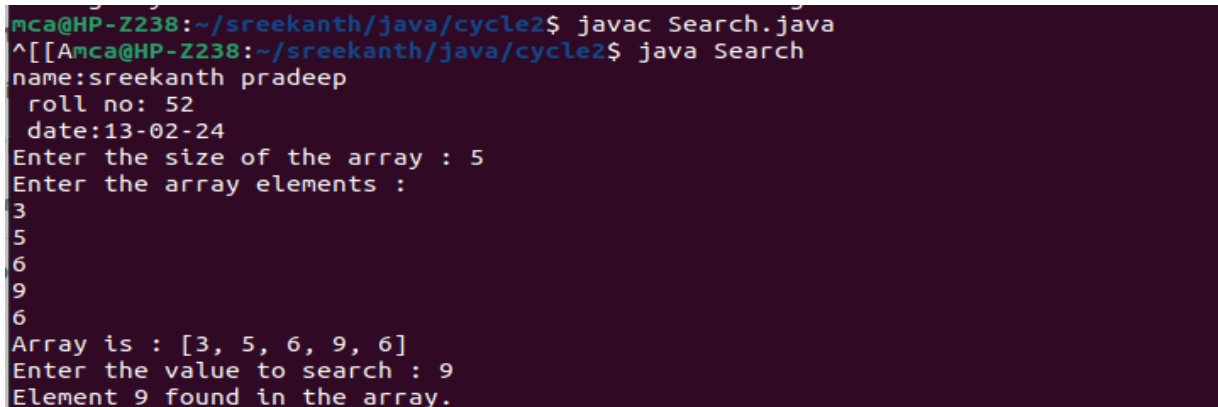
```
import java.util.Scanner;
import java.util.Arrays;

class Search{
    public static void main(String arg[]){
        System.out.println("name:sreekanth pradeep\n roll no: 52\n date:13-02-24");

        Scanner scanner = new Scanner(System.in);
        System.out.print("Enter the size of the array : ");
        int n = scanner.nextInt();
        int arr[] = new int[n];
        System.out.println("Enter the array elements : ");
        for(int i=0; i<n; i++){
            arr[i] = scanner.nextInt();
        }
        System.out.println("Array is : " + Arrays.toString(arr));
        System.out.print("Enter the value to search : ");
        int value = scanner.nextInt();
        int flag = 0;
        for(int i=0; i<n; i++){
            if(value == arr[i]){
                flag = 1;
                break;
            }
        }
        if(flag == 0) System.out.println("Element " + value + " not found in the array.");
        else System.out.println("Element " + value + " found in the array.");

        scanner.close();
    }
}
```

### Output:



```
mca@HP-Z238:~/sreekanth/java/cycle2$ javac Search.java
^[[Amca@HP-Z238:~/sreekanth/java/cycle2$ java Search
name:sreekanth pradeep
 roll no: 52
 date:13-02-24
Enter the size of the array : 5
Enter the array elements :
3
5
6
9
6
Array is : [3, 5, 6, 9, 6]
Enter the value to search : 9
Element 9 found in the array.
```

## 8.Perform string manipulations.

### Source Code:

```
import java.util.Scanner;

class Manipulation{
    public static void main(String arg[]){
        System.out.println("name:sreekanth pradeep\n roll no: 52\n date:13-02-24");

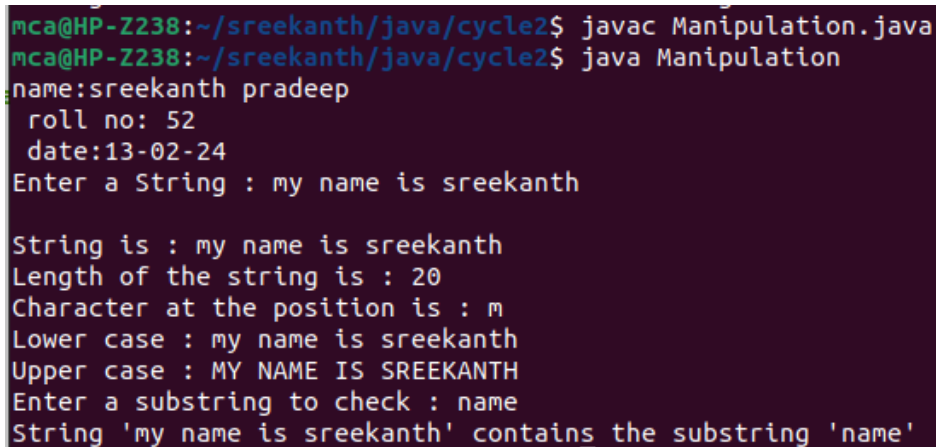
        Scanner scanner = new Scanner(System.in);
        System.out.print("Enter a String : ");
        String str = scanner.nextLine();

        System.out.println("\nString is : " + str);
        System.out.println("Length of the string is : " + str.length());
        System.out.println("Character at the position is : " + str.charAt(0));
        System.out.println("Lower case : " + str.toLowerCase());
        System.out.println("Upper case : " + str.toUpperCase());

        System.out.print("Enter a substring to check : ");
        String subStr = scanner.nextLine();
        if(str.contains(subStr)) System.out.println("String '" + str + "' contains the substring '" +
subStr + "'");
        else System.out.println("String '" + str + "' not contains the substring '" + subStr + "'");

        scanner.close();
    }
}
```

### Output:



```
mca@HP-Z238:~/sreekanth/java/cycle2$ javac Manipulation.java
mca@HP-Z238:~/sreekanth/java/cycle2$ java Manipulation
name:sreekanth pradeep
 roll no: 52
 date:13-02-24
Enter a String : my name is sreekanth

String is : my name is sreekanth
Length of the string is : 20
Character at the position is : m
Lower case : my name is sreekanth
Upper case : MY NAME IS SREEKANTH
Enter a substring to check : name
String 'my name is sreekanth' contains the substring 'name'
```

**9.Program to create a class for Employee having attributes eNo, eName eSalary. Read n employ information and Search for an employee given eNo, using the concept of Array of Objects.**

**Source Code:**

```
Import java.util.Scanner;
```

```
class Employee{
    int eNo, eSalary;
    String eName;

    public Employee(int no, String name, int salary) {
        this.eNo = no;
        this.eName = name;
        this.eSalary = salary;
    }
}

class Main{
    public static void main(String arg[]){
        System.out.println("name:sreekanth pradeep\n roll no: 52\n date:13-02-24");

        Scanner scanner = new Scanner(System.in);
        System.out.print("Enter the no of Employees : ");
        int n = scanner.nextInt();
        Employee arr[] = new Employee[n];
        for(int i=0; i<n; i++){
            System.out.println("Enter the details of employee " + Integer.toString(i+1));
            System.out.print("Enter the employee id : ");
            int no = scanner.nextInt();
            System.out.print("Enter the employee name : ");
            scanner.nextLine();
            String name = scanner.nextLine();
            System.out.print("Enter the salary : ");
            int salary = scanner.nextInt();
            arr[i] = new Employee(no, name, salary);
        }
        System.out.print("\nEnter the employee id to search : ");
        int id = scanner.nextInt();
        int flag = 0;
        for(int i=0; i<n; i++){
            if(arr[i].eNo == id){
                System.out.println("Employee found.\nid : " + Integer.toString(id) + "\nname : " +
arr[i].eName + "\nsalary : " + Integer.toString(arr[i].eSalary));
                flag = 1;
                break;
            }
        }
        if(flag == 0) System.out.println("Employee not found");
    }
}
```

```
        scanner.close();
    }
}
```

### Output:

```
mca@HP-Z238:~/sreekanth/java/cycle2$ java Main
name:sreekanth pradeep
roll no: 52
date:13-02-24
Enter the no of Employees : 3
Enter the details of employee 1
Enter the employee id : 101
Enter the employee name : sree
Enter the salary : 10000
Enter the details of employee 2
Enter the employee id : 102
Enter the employee name : sharu
Enter the salary : 10000
Enter the details of employee 3
Enter the employee id : 103
Enter the employee name : sathi
Enter the salary : 120000

Enter the employee id to search : 102
Employee found.
id : 102
name : sharu
salary : 10000
```