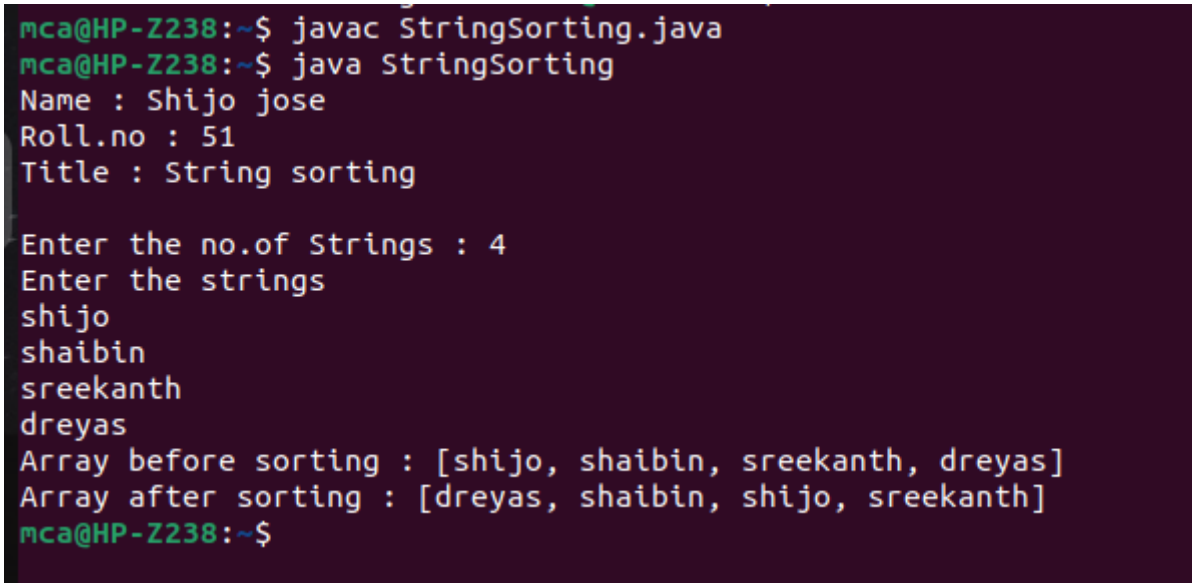
6. Program to Sort strings

```
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 : Shijo jose\nRoll.no : 51);

    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));
    // sorting method 1

    // Arrays.sort(str);
    // System.out.println(Arrays.toString(str));

    // sorting method 2
    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();
    }
}
```

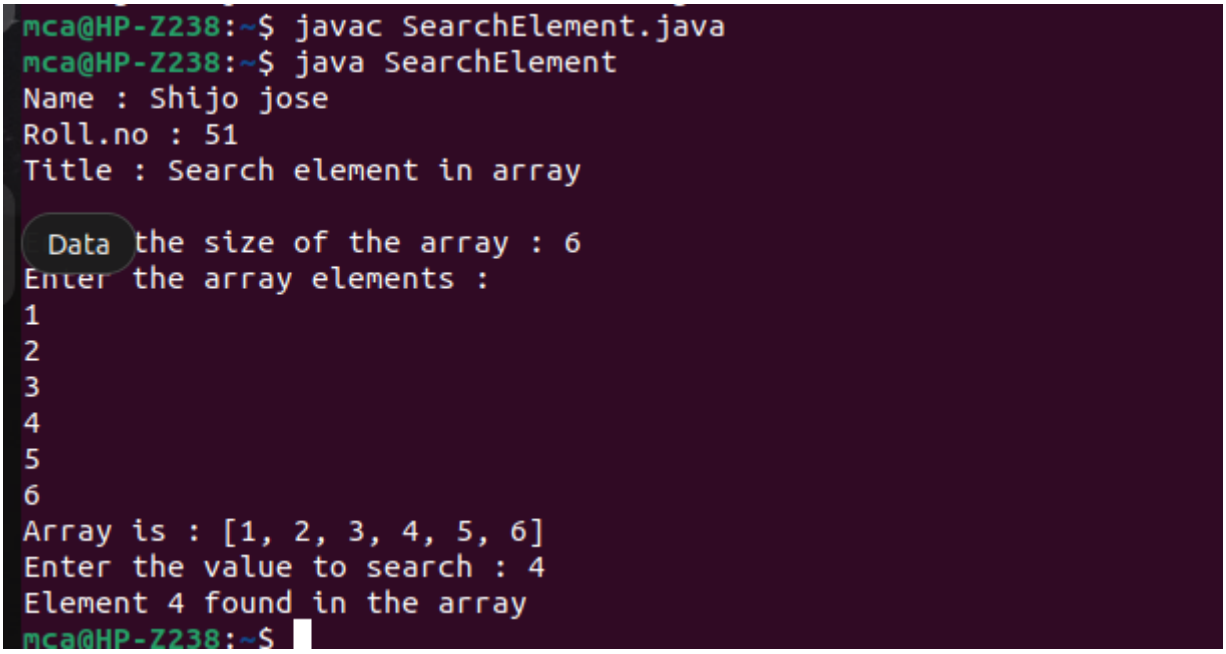
output



7. Search an element in an array.

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

class SearchElement{
   public static void main(String arg[]){
                System.out.println("Name : Shijo jose\nRoll.no : 51\nTitle : Search element in
array\n");

       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<arr.length; 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;
          }
       }
       System.out.println("Element " + value + (flag == 0 ? " not found in the array" : " found in
the  array"));

       scanner.close();
   }
}
```

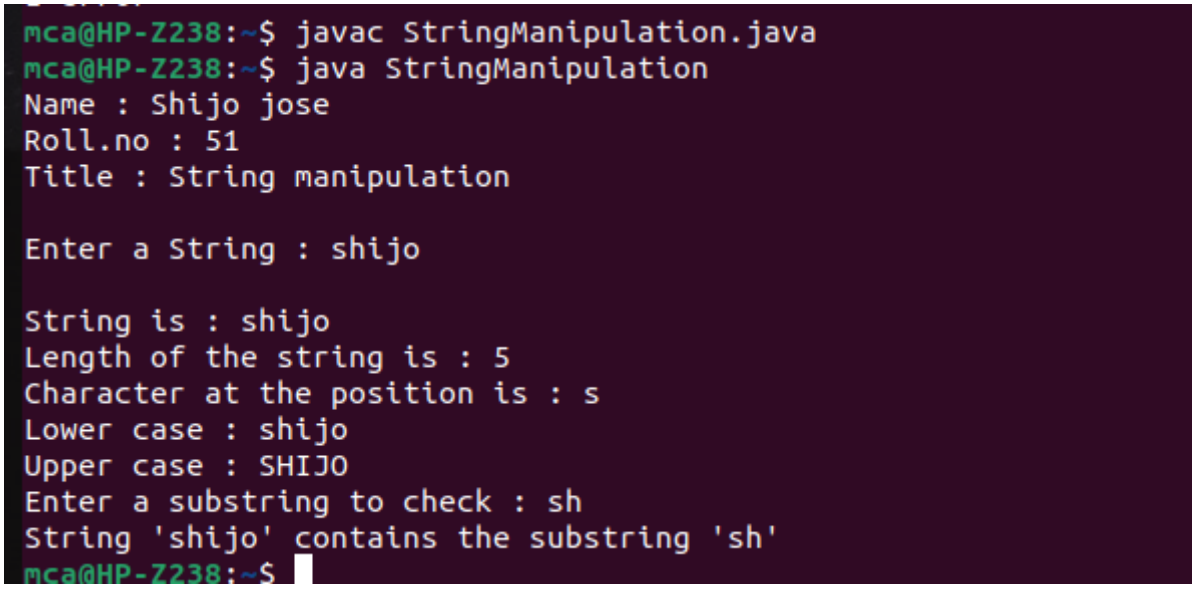
output


mca@HP-Z238:~$ javac SearchElement.java
mca@HP-Z238:~$ java SearchElement
Name : Shijo jose
Roll.no : 51
Title : Search element in array
Data
the size of the array : 6
Enter the array elements :
1
2
3
4
5
6
Array is : [1, 2, 3, 4, 5, 6]
Enter the value to search : 4
Element 4 found in the array
mca@HP-Z238:~$

8. Perform string manipulations

```
import java.util.Scanner;

class StringManipulation{
   public static void main(String arg[]){
                System.out.println("Name : Shijo jose\nRoll.no : 51\nTitle : String manipulation\
n");

      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:~$ javac StringManipulation.java
mca@HP-Z238:~$ java StringManipulation
Name : Shijo jose
Roll.no : 51
Title : String manipulation
Enter a String : shijo
String is : shijo
Length of the string is : 5
Character at the position is : s
Lower case : shijo
Upper case : SHIJO
Enter a substring to check : sh
String 'shijo' contains the substring 'sh'
mca@HP-Z238:~$

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.

```
Import java.util.scanner;
class Employee {
private int eNo;
private String eName;
private double eSalary;

public Employee(int eNo, String eName, double eSalary) {
this.eNo = eNo;
this.eName = eName;
this.eSalary = eSalary;
}

public int getENo() {
return eNo;
}

public String getEName() {
return eName;
}

public double getESalary() {
return eSalary;
}
}

public class EmployeeMain1 {
public static void main(String[] args) {
System.out.println("Name : Shijo Jose\nRoll.no : 51\nTitle : Employee\nDate : 26/02/2024\n");
Scanner scanner = new Scanner(System.in);
```

```
System.out.print("Enter the number of employees: ");

int n = scanner.nextInt();

Employee[] employees = new Employee[n];
for (int i = 0; i < n; i++) {
System.out.println("Enter details for employee " + (i + 1) + ":");
System.out.print("Employee Number: ");
int eNo = scanner.nextInt();
scanner.nextLine();
System.out.print("Employee Name: ");
String eName = scanner.nextLine();
System.out.print("Employee Salary: ");
double eSalary = scanner.nextDouble();

employees[i] = new Employee(eNo, eName, eSalary);
}

System.out.print("Enter the employee number to search: ");
int searchENo = scanner.nextInt();

boolean found = false;
for (Employee emp : employees) {
if (emp.getENo() == searchENo) {
found = true;
System.out.println("Employee found:");
System.out.println("Employee Number: " + emp.getENo());
System.out.println("Employee Name: " + emp.getEName());
System.out.println("Employee Salary: " + emp.getESalary());
break;
}
}

if (!found) {
```

```
System.out.println("Employee with employee number " + searchENo + " not found.");
}

scanner.close();
}
}
```

output

```
mca@HP-Z238:~/shaibin/Java/cycle-3$ javac EmployeeMain1.java
mca@HP-Z238:~/shaibin/Java/cycle-3$ java EmployeeMain1
Name : Shijo Jose
Roll.no : 51
Title : Employee
Date : 26/02/2024

Enter the number of employees: 4
Enter details for employee 1:
Employee Number: 01
Employee Name: shijo
Employee Salary: 40000
Enter details for employee 2:
Employee Number: 02
Employee Name: shaibin
Employee Salary: 60000
Enter details for employee 3:
Employee Number: 03
Employee Name: sreekanth
Employee Salary: 70000
Enter details for employee 4:
Employee Number: 04
Employee Name: anadhakrishnan
Employee Salary: 30000
Enter the employee number to search: 01
Employee found:
Employee Number: 1
Employee Name: shijo
Employee Salary: 40000.0
mca@HP-Z238:~/shaibin/Java/cycle-3$
```