

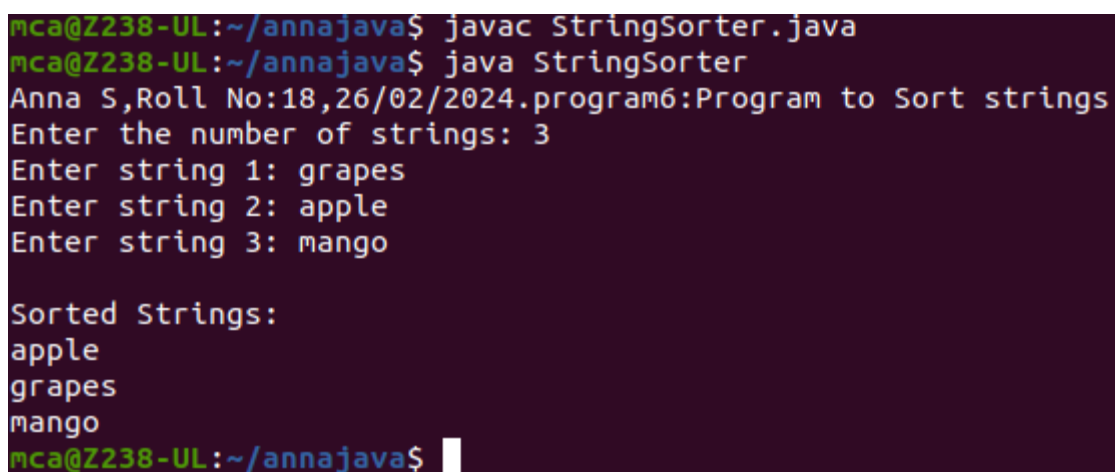
Program :6

Aim: Program to Sort strings

Source Code:

```
import java.util.Arrays;
import java.util.Scanner;
public class StringSorter {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        System.out.println("Anna S,Roll No:18,26/02/2024.program6:Program to Sort strings");
        System.out.print("Enter the number of strings: ");
        int numberOfStrings = scanner.nextInt();
        scanner.nextLine();
        String[] strings = new String[numberOfStrings];
        for (int i = 0; i < numberOfStrings; i++) {
            System.out.print("Enter string " + (i + 1) + ": ");
            strings[i] = scanner.nextLine();
        }
        Arrays.sort(strings);
        System.out.println("\nSorted Strings:");
        for (String str : strings) {
            System.out.println(str);
        }
        scanner.close();
    }
}
```

Output:



```
mca@Z238-UL:~/annajava$ javac StringSorter.java
mca@Z238-UL:~/annajava$ java StringSorter
Anna S,Roll No:18,26/02/2024.program6:Program to Sort strings
Enter the number of strings: 3
Enter string 1: grapes
Enter string 2: apple
Enter string 3: mango

Sorted Strings:
apple
grapes
mango
mca@Z238-UL:~/annajava$
```

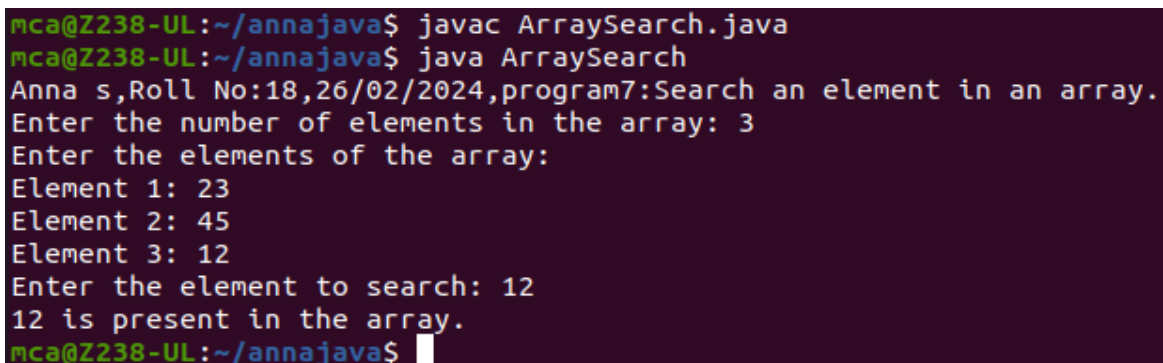
Program :7

Aim: Search an element in an array.

Source Code:

```
import java.util.Scanner;
public class ArraySearch {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        System.out.println("Anna s,Roll No:18,26/02/2024,program7:Search an element in an array.");
        System.out.print("Enter the number of elements in the array: ");
        int size = scanner.nextInt();
        int[] array = new int[size];
        System.out.println("Enter the elements of the array:");
        for (int i = 0; i < size; i++) {
            System.out.print("Element " + (i + 1) + ": ");
            array[i] = scanner.nextInt();
        }
        System.out.print("Enter the element to search: ");
        int searchElement = scanner.nextInt();
        boolean found = false;
        for (int i = 0; i < size; i++) {
            if (array[i] == searchElement) {
                found = true;
                break;
            }
        }
        if (found) {
            System.out.println(searchElement + " is present in the array.");
        } else {
            System.out.println(searchElement + " is not present in the array.");
        }
        scanner.close();
    }
}
```

Output:



```
mca@Z238-UL:~/annajava$ javac ArraySearch.java
mca@Z238-UL:~/annajava$ java ArraySearch
Anna s,Roll No:18,26/02/2024,program7:Search an element in an array.
Enter the number of elements in the array: 3
Enter the elements of the array:
Element 1: 23
Element 2: 45
Element 3: 12
Enter the element to search: 12
12 is present in the array.
mca@Z238-UL:~/annajava$
```

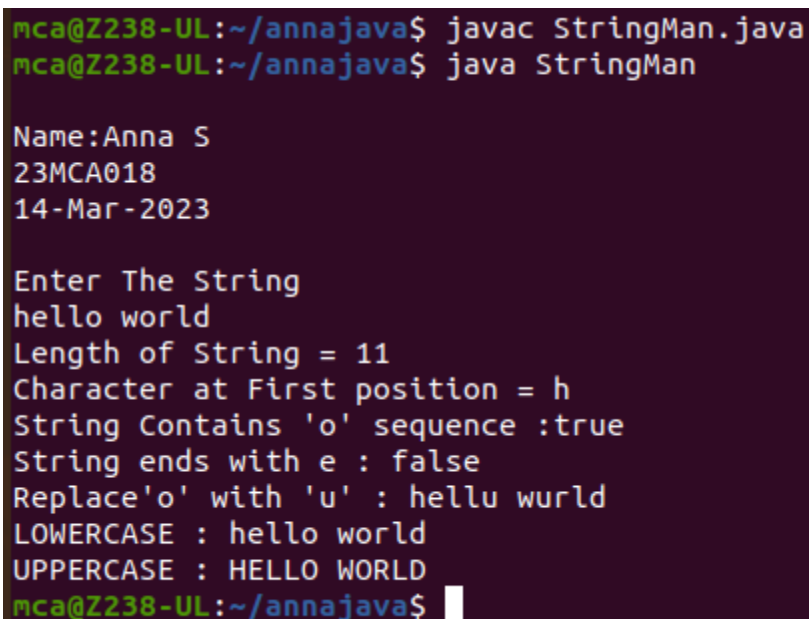
Program :8

Aim: Perform string manipulations.

Source Code:

```
import java.util.Scanner;
public class StringMan{
public static void main(String[] args) {
System.out.println(" \nName:Anna S\n23MCA018\n14-Mar-2023\n");
System.out.println("Enter The String");
Scanner sc = new Scanner(System.in);
String str1 = sc.nextLine();
System.out.println("Length of String = "+str1.length());
System.out.println("Character at First position = "+str1.charAt(0));
System.out.println("String Contains 'o' sequence :"+str1.contains("o"));
System.out.println("String ends with e : "+str1.endsWith("e"));
System.out.println("Replace'o' with 'u' : "+str1.replaceAll("o","u"));
System.out.println("LOWERCASE : "+str1.toLowerCase());
System.out.println("UPPERCASE : "+str1.toUpperCase());
}
}
```

Output:



```
mca@Z238-UL:~/annajava$ javac StringMan.java
mca@Z238-UL:~/annajava$ java StringMan

Name:Anna S
23MCA018
14-Mar-2023

Enter The String
hello world
Length of String = 11
Character at First position = h
String Contains 'o' sequence :true
String ends with e : false
Replace'o' with 'u' : hellu wrld
LOWERCASE : hello world
UPPERCASE : HELLO WORLD
mca@Z238-UL:~/annajava$
```

Program :9

Aim: 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;
public class employee {
    int eNo;
    String eName;
    double eSalary;
    public void getdetails(){
        System.out.println("\nEnter the Employee details");
        Scanner sc = new Scanner(System.in);
        System.out.println("Employee number : ");
        eNo=sc.nextInt();
        System.out.println("Name : ");
        sc.nextLine();
        eName=sc.nextLine();
        System.out.println("Salary : ");
        eSalary=sc.nextDouble();
    }
    void display(){
        System.out.println("Empolyee No :"+eNo);
        System.out.println("Name :"+eName);
        System.out.println("Salary Amount"+eSalary+"\n");
    }
    public static void main(String[] args) {
        System.out.println("Anna S \n23MCA018 \n14-Mar-2023");
        System.out.println("\nEnter the No. of Employee's");
        Scanner sc1 = new Scanner(System.in);
        int num = sc1.nextInt();
        employee arr[]=new employee[num];
        for(int i =0;i<num;i++){
            arr[i]=new employee();
            arr[i].getdetails();
        }
        System.out.println("\nInformations of all the employee's");
        for(int i=0;i<num;i++){
            arr[i].display();
        }
        boolean state = false;
        System.out.println("\nEnter the Employee Number to get details of a employee");
        int num2= sc1.nextInt();
```

```
for(int i=0;i<num;i++){  
if(arr[i].eNo==num2){  
System.out.println("\nEmployee details");  
arr[i].display();  
}  
}  
}  
}
```

Output:

```
mca@Z238-UL:~$ cd annajava  
mca@Z238-UL:~/annajava$ javac employee.java  
mca@Z238-UL:~/annajava$ java employee  
Anna S  
23MCA018  
14-Mar-2023  
  
Enter the No. of Employee's  
3  
  
Enter the Employee details  
Employee number :  
1  
Name :  
Anna  
Salary :  
50000  
  
Enter the Employee details  
Employee number :  
2  
Name :  
Sara  
Salary :  
60000  
  
Enter the Employee details  
Employee number :  
3  
Name :  
Richa  
Salary :  
30000  
  
Informations of all the employee's  
Empolyee No :1  
Name :Anna  
Salary Amount50000.0  
  
Empolyee No :2  
Name :Sara  
Salary Amount60000.0  
  
Empolyee No :3  
Name :Richa  
Salary Amount30000.0  
  
Enter the Employee Number to get details of a employee  
2  
  
Employee details  
Empolyee No :2  
Name :Sara  
Salary Amount60000.0  
  
mca@Z238-UL:~/annajava$
```