```
Program6:
Aim: Program to sort strings.
Source Code:
      import java.util.Scanner;
      import java.util.Arrays;
      public class sort {
        public static void main(String[] args) {
        int i,j;
        Scanner sc = new Scanner(System.in);
        System.out.println("INDULEKHA PS,ROLL NO:31");
        System.out.println("Enter the number of words");
        int num=sc.nextInt();
        String word[]=new String[num];
        sc.nextLine();
        for( i=0;i<num;i++){
        System.out.println("\nEnter a Word\n");
        word[i]=sc.nextLine();
        for( i=0;i<num-1;i++){
          for(j=i+1;j< num;j++){
            if(word[i].compareTo(word[i])>0){
               String temp = word[i];
               word[i]=word[j];
               word[j]=temp;
            }
          }
        System.out.println("Sorted Strings using compareTo function ="+Arrays.toString(word));
        System.out.println(word);
      }}
```

Output:

```
mca@Z238-UL:-/ijava$ javac sort.java
mca@Z238-UL:-/ijava$ javac sort
INDULEKHA PS,ROLL NO:31
Enter the number of words
4
Enter a Word
apple
Enter a Word
orange
Enter a Word
banana
Enter a Word
pineapple
Sorted Strings using compareTo function =[apple, banana, orange, pineapple]
[Ljava.lang.String;@677327b6
mca@Z238-UL:-/ijava$ |
```

Program7:

Aim: Search an element in an array.

Source Code:

```
import java.util.Scanner;
public class Search {
  public static void main(String[] args) {
     int i,j,x=0;
     boolean state = false;
     Scanner sc = new Scanner(System.in);
     System.out.println("indulekha ps,roll no:31");
     System.out.println("Enter the number of elemets in array");
     int num=sc.nextInt();
     String word[]=new String[num];
     sc.nextLine();
     for( i=0;i<num;i++){
     System.out.println("\nEnter a Word\n");
     word[i]=sc.nextLine();
     System.out.println("Enter the element to Search");
     String search = sc.nextLine();
     for( i=0;i<num;i++){
       if(word[i].equals(search)){
          x = i;
          state = true;
       if(state){
     System.out.println("Element found at position = "+x);
       else{
     System.out.println("Element found not found");
       }
  }
```

Output:

```
mca@ZZ38-UL:~/ijava$ javac Search.java
mca@ZZ38-UL:~/ijava$ java Search
indulekha ps,roll no:31
Enter the number of elemets in array
3
Enter a Word
hai
Enter a Word
hellofriends
Enter a Word
goodmorning
Enter the element to Search
hellofriends
Element found at position = 1
mca@ZZ38-UL:~/ijava$
```

Program8:

Aim: Perform string manipulations

Source Code:

```
import java.util.Scanner;
public class Stringman{
public static void main(String[] args){
    System.out.println("INDULEKHA PS,ROLL NO:31");
    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(1));
    System.out.println("String Contains'Col'sequence :"+str1.contains("Col"));
    System.out.println("String ends with e :"+str1.endsWith("e"));
    System.out.println("Replace'col'with'kol':"+str1.replaceAll("col","kol"));
    System.out.println("LOWERCASE:"+str1.toLowerCase());
    System.out.println("UPPERCASE:"+str1.toUpperCase());
}
```

Output:

```
mca@ZZ38-UL:~/ijava$ javac Stringman.java
mca@ZZ38-UL:~/ijava$ javac Stringman
INDULEKHA PS,ROLL NO:31
Enter the string
hellojava
Length of String = 9
Character at First position = e
String Contains'Col'sequence :false
String ends with e :false
Replace'col'with'kol':hellojava
LOWERCASE:hellojava
UPPERCASE:HELLOJAVA
mca@ZZ38-UL:~/ijava$
```

Program9:

Aim: Program to create a class for employee having attributes eno,ename and 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;
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("INDULEKHA PS,ROLL NO:31");
     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: ~/ijava
   mca@Z238-UL:~/tjava$ javac employee.java
mca@Z238-UL:~/tjava$ java employee
INDULEKHA PS,ROLL NO:31
   Enter the No. of Employee's
   Enter the Employee details
   Employee number :
   Name :
   jack
    Salary :
   10000
   Enter the Employee details
   Employee number :
   Name :
    emi
   Salary :
   10000
   Informations of all the employee's
   Empolyee No :21
Name :jack
Salary Amount10000.0
   Empolyee No :22
Name :emi
Salary Amount10000.0
   Enter the Employee Number to get details of a employee
```

20MCA132OOPSLAB

DEPT.OF COMPUTER APPLICATION