Experiment No.: 1

Aim: Program to Sort strings.

CO2: Implement Strings and Arrays.

Procedure:

```
import java.util.Scanner;
public class sort
{
	public static void main(String[] args)
	{
		Scanner obj=new Scanner(System.in);
		System.out.println("Enter string array size");
		Integer n=obj.nextInt();
		String arr[]=new String[n];
		System.out.println("Enter elements");
		int i=0,j;
		for(i=0;i<n;i++)
		{
		arr[i]=obj.next();		//because in string array
		}
		System.out.println("Printing original");
		for(i=0;i<n;i++)
		{
		System.out.println(arr[i]);
		}

		String temp;
		for(i=0;i<n;i++)
		{
			for(j=i+1;j<n;j++)
			{
				if(arr[i].compareTo(arr[j])>0)
				{
					temp=arr[i];
					arr[i]=arr[j];
					arr[j]=temp;
				}
			}
		}
		System.out.println("Printing sorted array");
		for(i=0;i<n;i++)
		{
		System.out.println(arr[i]);
		}



	}
}
```

Output:

```
C:\Users\ajcemca\Desktop\Shyam>javac sort.java

C:\Users\ajcemca\Desktop\Shyam>java sort
Enter string array size
3
Enter elements
SK
PK
AK
Printing original
SK
PK
AK
Printing sorted array
AK
PK
SK

C:\Users\ajcemca\Desktop\Shyam>
```

Result:

The program has been executed successfully and the result is obtained. Thus CO2 is attained.

Experiment No.: 2

Aim : Search an element in an array.

CO2: Implement Strings and Arrays.

Procedure:

```
import java.util.Scanner;
public class Arraysearch
{
	public static void main(String[] args)
	{
		Scanner obj=new Scanner(System.in);
		System.out.println("Enter the size of array");
		Integer n=obj.nextInt();
		int arr[]=new int[n];
		int i,flag=0;
		System.out.println("Enter the elements of array");
		for(i=0;i<arr.length;i++)
		{
			arr[i]=obj.nextInt();
		}
		System.out.println("Enter item to be searched");
		Integer item=obj.nextInt();
		System.out.println("searching");
		for(i=0;i<arr.length;i++)
	   {
		if(item==arr[i])
		 {
			System.out.println("Value found at loc "+i);
			flag=1;

		 }

		 }
		 if(flag==0)
		 {
			 System.out.println("item not found");
	}

	  }

}
```

Output:

```
C:\Users\ajcemca\Desktop\Shyam>javac Arraysearch.java

C:\Users\ajcemca\Desktop\Shyam>java Arraysearch
Enter the size of array
3
Enter the elements of array
3
2
5
Enter item to be searched
1
searching
item not found

C:\Users\ajcemca\Desktop\Shyam>
```

Result:

The program has been executed successfully and the result is obtained. Thus CO2 is attained.

Experiment No.: 3

Aim : Perform string manipulations

CO2: Implement Strings and Arrays.

Procedure:

```
import java.util.Scanner;
public class strman
{
    public static void main(String[] args)
    {
        Scanner obj=new Scanner(System.in);
        System.out.println("Enter two strings:");
        String str1=obj.nextLine();
        String str2=obj.nextLine();
        System.out.println("string concat is :"+str1.concat(str2));
        if(str1.equals(str2))
        {
            System.out.println("Both string are same");
        }
        else
        {
            System.out.println("Both string are not same");
        }
        System.out.println("string to upper caseis: "+str1.toUpperCase());
        System.out.println("string to lower case is: "+str2.toLowerCase());
        System.out.println("substring  is: "+str1.substring(1,3));
    System.out.println("Trim function is :"+str1.trim());
    System.out.println("Length of first string is :"+str1.length());
    }

}
```

Output:

```
C:\Users\ajcemca\Desktop\Shyam>javac strman.java

C:\Users\ajcemca\Desktop\Shyam>java strman
Enter two strings:
Shyam
Daya
string concat is :ShyamDaya
Both string are not same
string to upper caseis: SHYAM
string to lower case is: daya
substring  is: hy
Trim function is :Shyam
Length of first string is :5

C:\Users\ajcemca\Desktop\Shyam>
```

Result:

The program has been executed successfully and the result is obtained. Thus CO2 is attained.

Experiment No.: 4

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.

CO2: Implement Strings and Arrays.

Procedure:

```
import java.util.Scanner;
public class Emp
{
	int eno;
	String ename;
	int esalary;

	public void get()
	{
		Scanner cin=new Scanner(System.in);
		System.out.println("Enter employee number: ");
		eno=cin.nextInt();
		System.out.println("Enter employee name: ");
		ename=cin.next();
		System.out.println("Enter salary of employee: ");
		esalary=cin.nextInt();
	}
	public void display()
	{
		System.out.println("*********Employee**********");
		System.out.println("Employee number : "+eno);
		System.out.println("Employee name : "+ename);
		System.out.println("Salary : "+esalary);
	}
	public static void main(String[] args)
	{
```

```
        int i;
        Scanner cin=new Scanner(System.in);
        System.out.println("Enter the limit of array:");
        int n=cin.nextInt();
        Emp e[]=new Emp[n];
        for(i=0;i<n;i++)
        {
            e[i]=new Emp();
            e[i].get();
        }
        for(i=0;i<n;i++)
        {

            e[i].display();
        }
        System.out.println("Enter the eno:");
        int val=cin.nextInt();
        int flag=0;
        for(i=0;i<n;i++)
        {
            if(e[i].eno==val)
            {
                e[i].display();
                flag=1;
            }

    }
    if(flag==0)
    {
        System.out.println("Not found");
    }

}
}
```

Output:

```
C:\Users\ajcemca\Desktop\Shyam>java Emp
Enter the limit of array:
2
Enter employee number:
100
Enter employee name:
S
Enter salary of employee:
10000
Enter employee number:
200
Enter employee name:
K
Enter salary of employee:
8000
**********Employee***********
Employee number : 100
Employee name : S
Salary : 10000
**********Employee***********
Employee number : 200
Employee name : K
Salary : 8000
Enter the eno:
10
Not found

C:\Users\ajcemca\Desktop\Shyam>
```

Result:

The program has been executed successfully and the result is obtained. Thus CO2 is attained.