Name: Urvi Patel
Subject: CJ
Date: 22.07.2023
UID:22BIT034

Prac 4

Methods and Constructors

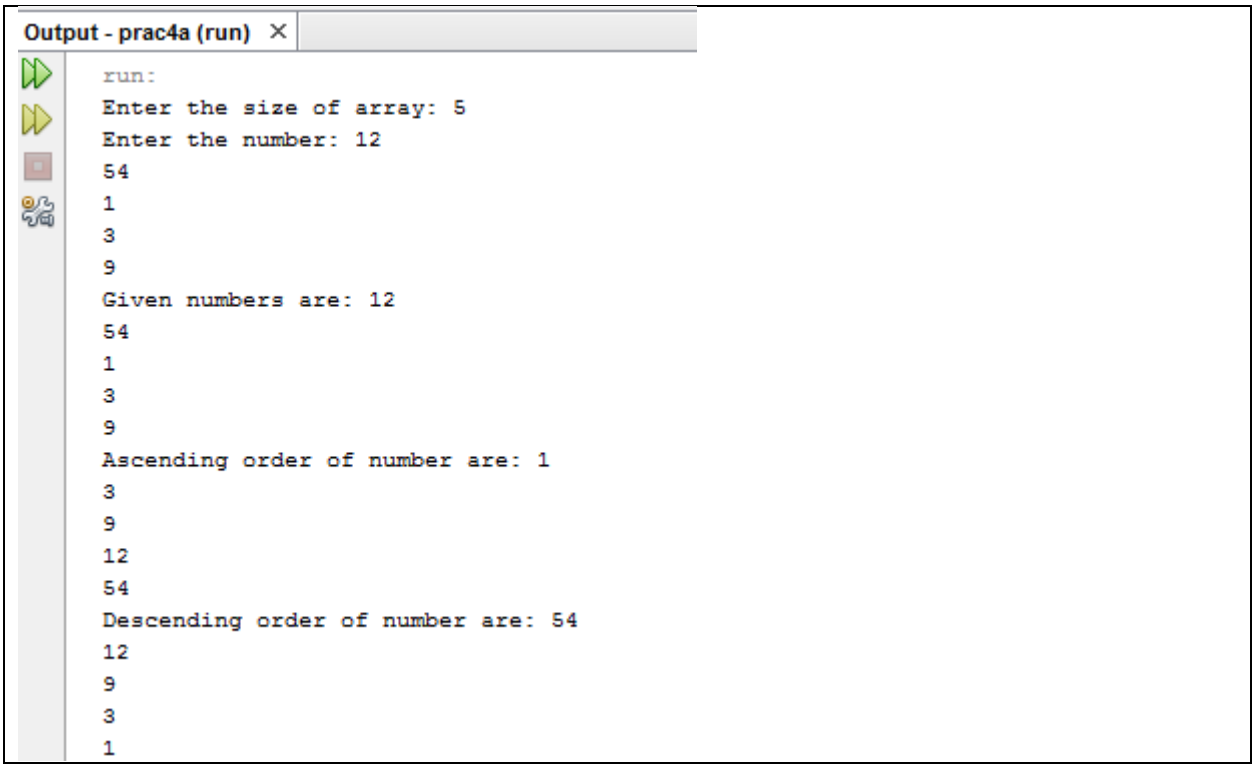
Designed a class SortData that contains the method asec() and desc().

```
import java.util.*;
class prac4A
{
Scanner input=new Scanner(System.in);
int num,i;
int arr[];
int temp=0;
public void getdata()
{
System.out.print("Enter the size of array: ");
num=input.nextInt();
arr=new int[num];
System.out.print("Enter the number: ");
for( i=0;i<num;i++)
{
arr[i]=input.nextInt();
}
}
void putdata()
{
System.out.print("Given numbers are: ");
for(i=0;i<num;i++)
{
System.out.println(arr[i]);
}
}
void asce()
{
for(i=0;i<num;i++)
{
for(int j=i+1;j<num;j++)
{
if(arr[i]>arr[j])
{
temp=arr[i];
arr[i]=arr[j];
arr[j]=temp;
}
}
}
System.out.print("Ascending order of number are: ");
for(int i=0;i<num;i++)
{
System.out.println(arr[i]);
}
```

```
}
void desc()
{
for(i=0;i<num;i++)
{
for(int j=i+1;j<num;j++)
{
if(arr[i]<arr[j])
{
temp=arr[i];
arr[i]=arr[j];
arr[j]=temp;
}
}
}
System.out.print("Descending order of number are: ");
for(int i=0;i<num;i++)
{
System.out.println(arr[i]);
}
}
public static void main(String args[])
{
prac4A ob=new prac4A();
ob.getdata();
ob.putdata();
ob.asce();
ob.desc();
}
}
```

Name: Urvi Patel
Subject: CJ

Date: 22.07.2023
UID:22BIT034



Designed a class that demonstrates the use of constructor and destructor

```
/*
 * To change this license header, choose License Headers in Project Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */
package prac4a;

/**
 *
 * @author lenovo
 */
class xyz
{
xyz()
{
System.out.println("Constructor method.....");
}
protected void finalize()
{
System.out.print("Garbage Collected.....");
}
}
class prac4B
```

```
{
public static void main(String args[])
{
xyz ob=new xyz();
ob=null;
System.gc();
}
}
```

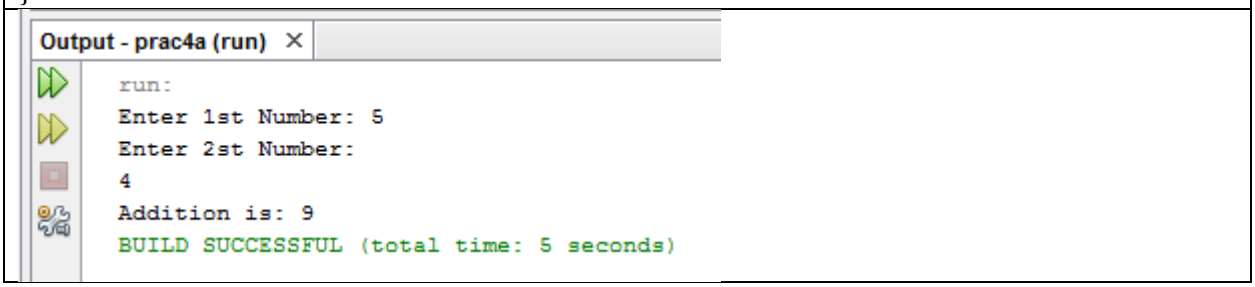
```
Constructor method.....
Garbage Collected.....BUILD SUCCESSFUL (total time: 0 seconds)
```

Write a java program to demonstrate the implementation of abstract class.

```
/*
 * To change this license header, choose License Headers in Project Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */
package prac4a;

/**
 *
 * @author lenovo
 */
import java.util.Scanner;
abstract class test
{
abstract void get();
}
class test1 extends test
{
void get()
{
int a,b;
Scanner ob=new Scanner(System.in);
System.out.print("Enter 1st Number: ");
a=ob.nextInt();
System.out.println("Enter 2st Number: ");
b=ob.nextInt();
System.out.println("Addition is: "+(a+b));
}
}
class prac4C
{
public static void main(String args[])
{
test1 obj=new test1();
obj.get();
}
```

```
}
```


Output - prac4a (run)
run:
Enter 1st Number: 5
Enter 2st Number:
4
Addition is: 9
BUILD SUCCESSFUL (total time: 5 seconds)