JAVA ASSESSMENT

BY MANSI AGARWAL

Q-1) C

Q-2) B

Q-3) C

Q-4) A

Q-5) E

Q-6) A

Q-7) A

Q-8) A

Q-9) A

Q-10) A

Q-11) A

Q-13) B

Q-14) C

Q-15) B

Q-16) C

Q-17) D

Q-18) A

Q-19) D

Q-21) D

Q-22) B

Q-23) A

Q-24) C

Q-26) A

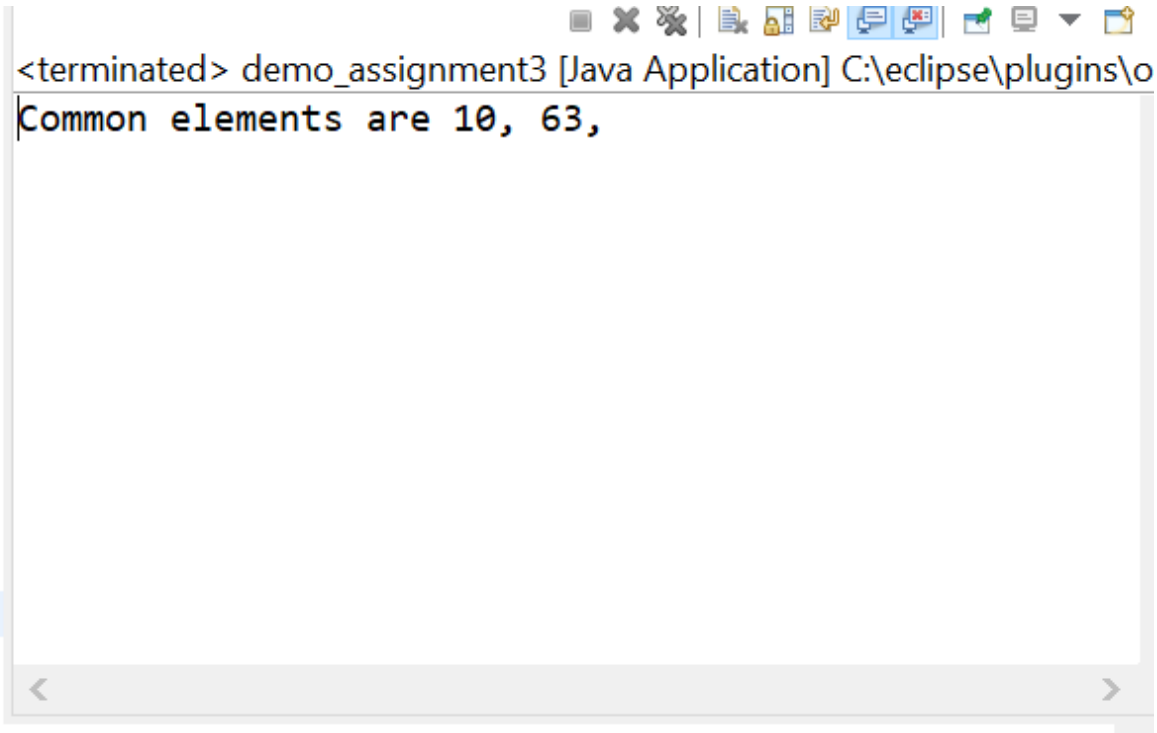
Q-27) C

Q-28) D

Q-29) C

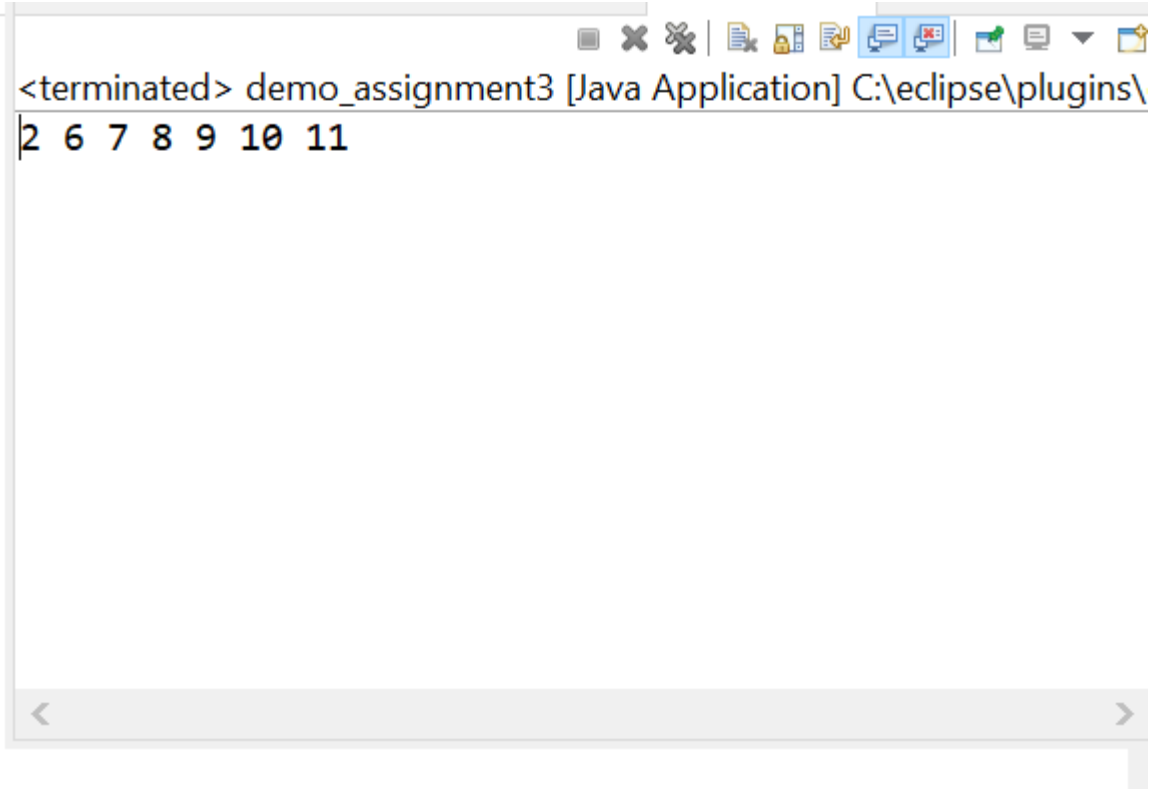
Q-31)

```
import java.util.ArrayList;
import java.util.Arrays;
import java.util.Scanner;
public static void main(String[] args) {
            int[] a1 = {10,12,63,84,56};
        int[] a2 = {60,10,27,63,45};
        System.out.print("Common elements are ");
        for(int i=0;i<a1.length;i++){
            for(int j=0;j<a2.length;j++){
                if(a1[i]==a2[j]){
                    System.out.print(a1[i]+", ");
                }
            }
        }
      }
```



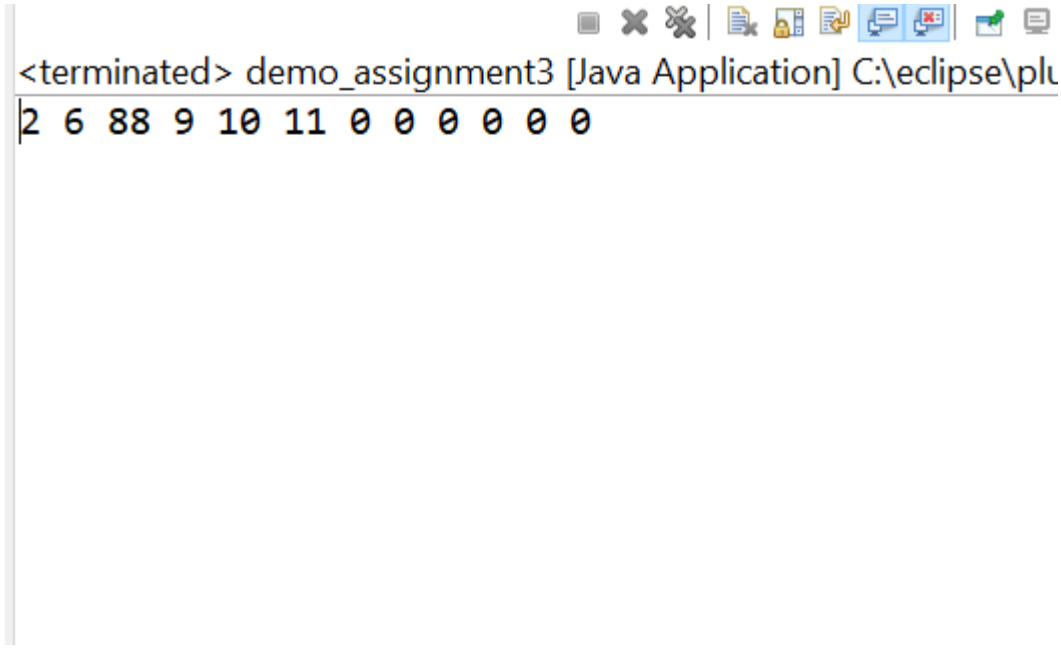
Q-32)

```
import java.util.ArrayList;
import java.util.Arrays;
import java.util.Scanner;
public static void main(String[] args) {
              int a1[] = {2,2,6,7,8,8,8,9,10,11,11};
               int sz = a1.length,j=0;
               if(sz>=2)
               {
                    int[] t = new int[sz];
                   for (int i=0; i<sz-1; i++){
                       if (a1[i] != a1[i+1]){
                           t[j++] = a1[i];
                       }
                    }
                   t[j++] = a1[sz-1];
                   for (int i=0; i<j; i++){
                       a1[i] = t[i];
                   }
               }
               for (int i=0;i<j; i++)
               System.out.print(a1[i]+" ");
      }
```



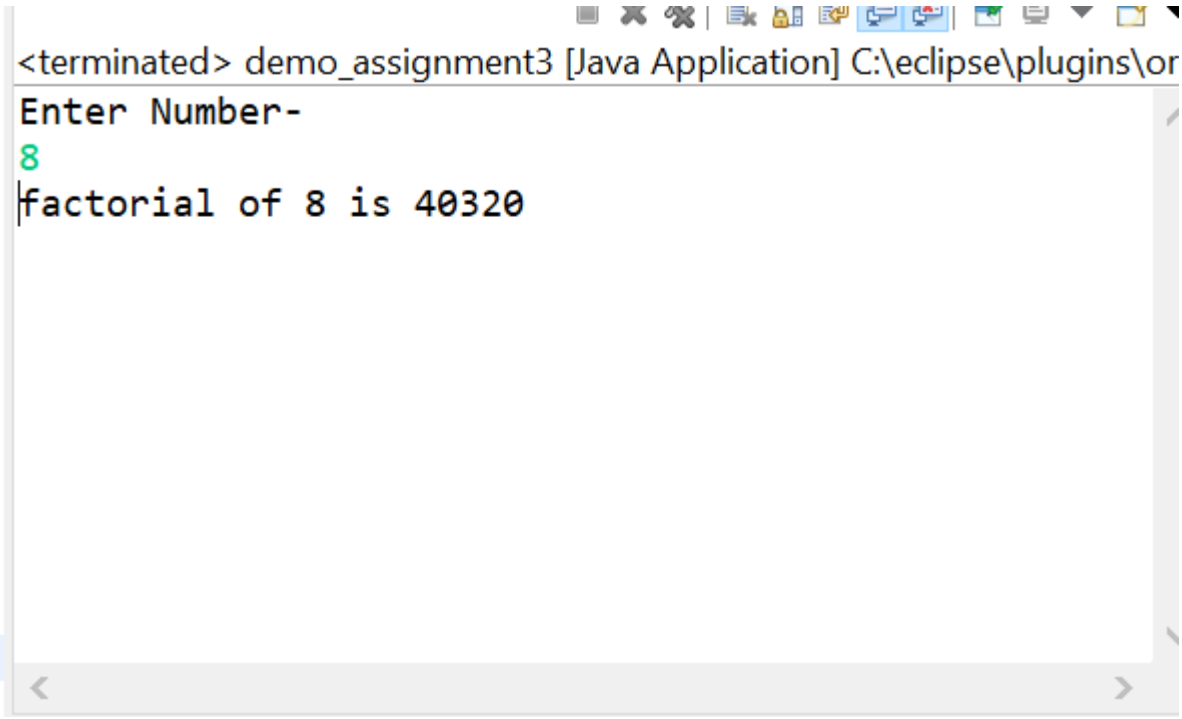
Q-33)

```
import java.util.ArrayList;
import java.util.Arrays;
import java.util.Scanner;
public static void main(String[] args) {
              int a1[] = {0,2,6,0,88,0,0,0,9,10,0,11};
               int sz = a1.length,j=0,ze=0;
               int t[]=new int[sz];
               for(int i=0;i<sz;i++)
               {
                    if(a1[i]!=0)
                    {
                          t[j++]=a1[i];
                          ze++;
                    }
               }
               for(int i=0;i<sz;i++)
               {
                    if(i<j)
                    a1[i]=t[i];
                    else a1[i]=0;
               }
               for(int i=0;i<sz;i++)
               System.out.print(a1[i]+ " ");
               }
```



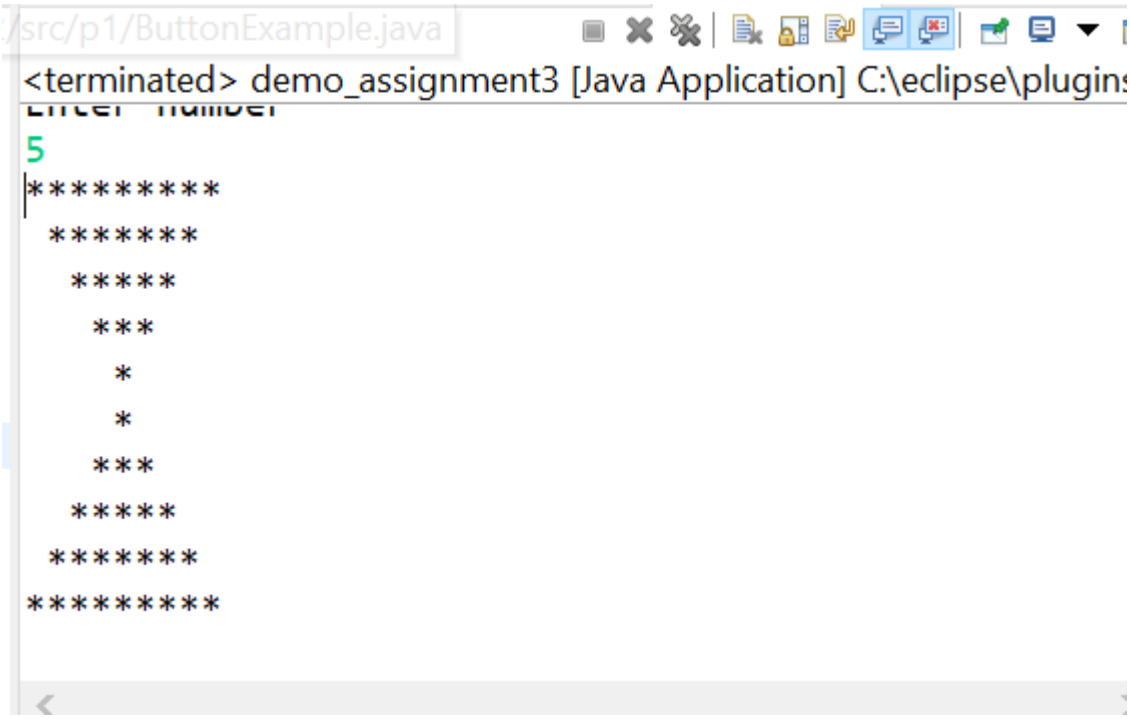
Q-34)

```
import java.util.ArrayList;
import java.util.Arrays;
import java.util.Scanner;
public static void main(String[] args) {
		Scanner sc= new Scanner(System.in);
		System.out.println("Enter Number- ");
		int num= sc.nextInt(),res=1;
		for(int i=2;i<=num;i++) res*=i;
		System.out.println("factorial of "+num+" is "+res);

	}
```



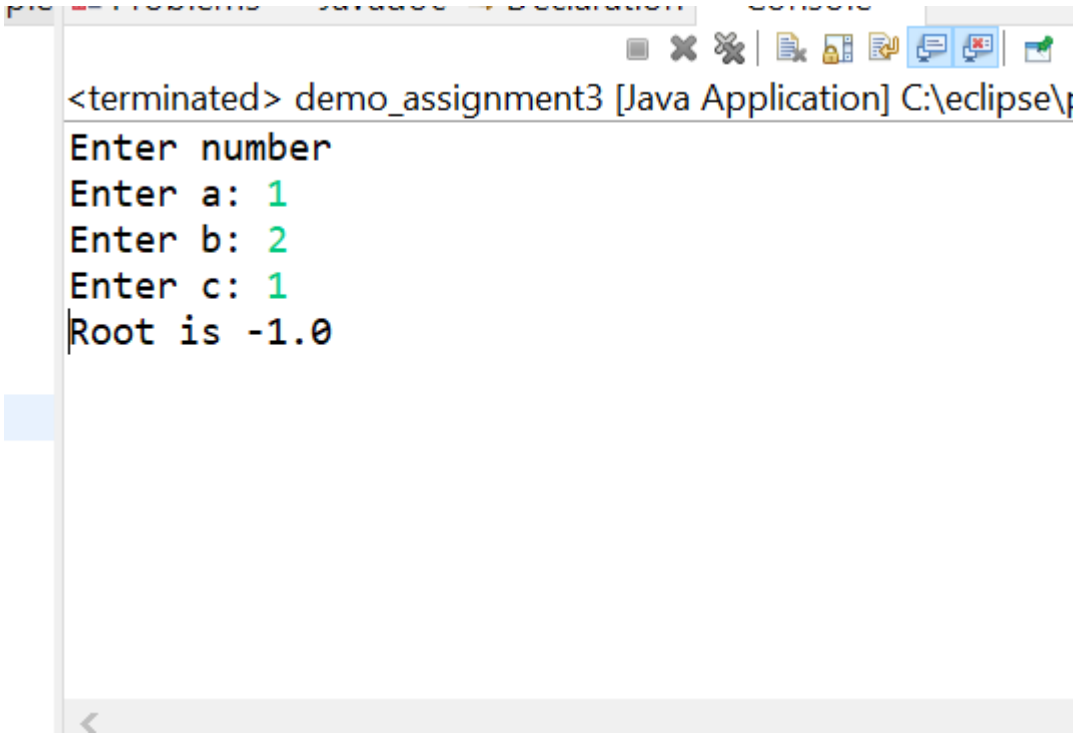
Q-35)

```
import java.util.ArrayList;
import java.util.Arrays;
import java.util.Scanner;
public static void main(String[] args) {
                    Scanner s=new Scanner(System.in);
                    System.out.println("Enter number");
                int n=s.nextInt();
                int x=n*2-1;
                for (int i=0;i<n;i++)
                {
                    for (int j=i;j>0;j--)
                    System.out.print(" ");
                    for (int k=0;k<x;k++)
                    System.out.print("*");
                    x-=2;
                    System.out.println();
                }

                x=1;
                for (int i=0;i<n;i++)
                {
                    for (int j=i;j<n-1;j++)
                    System.out.print(" ");
                    for (int k=0;k<x;k++)
                    System.out.print("*");
                    x += 2;
                    System.out.println();
                }

            }
```



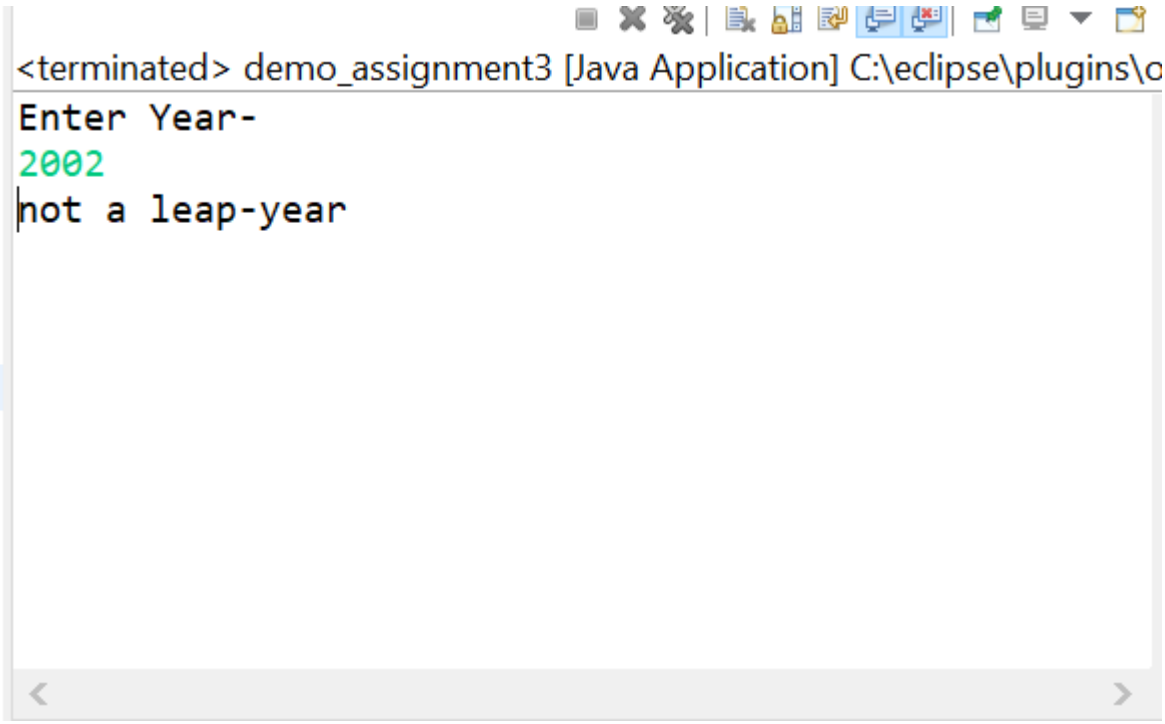
Q-36)

```
import java.util.ArrayList;
import java.util.Arrays;
import java.util.Scanner;
public static void main(String[] args) {
                    Scanner sc=new Scanner(System.in);
                    System.out.println("Enter number");
                    System.out.print("Enter a: ");
                    int a1 = sc.nextInt();
                    System.out.print("Enter b: ");
                    int b = sc.nextInt();
                    System.out.print("Enter c: ");
                    int c = sc.nextInt();
                    double d=b*b-4.0*a1*c;
                    if (d>0)
                    {
                    double r1=(-b+Math.pow(d, 0.5))/(2.0*a1);
                    double r2=(-b-Math.pow(d, 0.5))/(2.0*a1);
                    }
                    else if (d==0.0)
                    {
                    double r1=-b/(2.0*a1);
                    System.out.println("Root is " + r1);
                    }
                    else
                    {
                    System.out.println("Roots are not real.");
                    }
          }
```



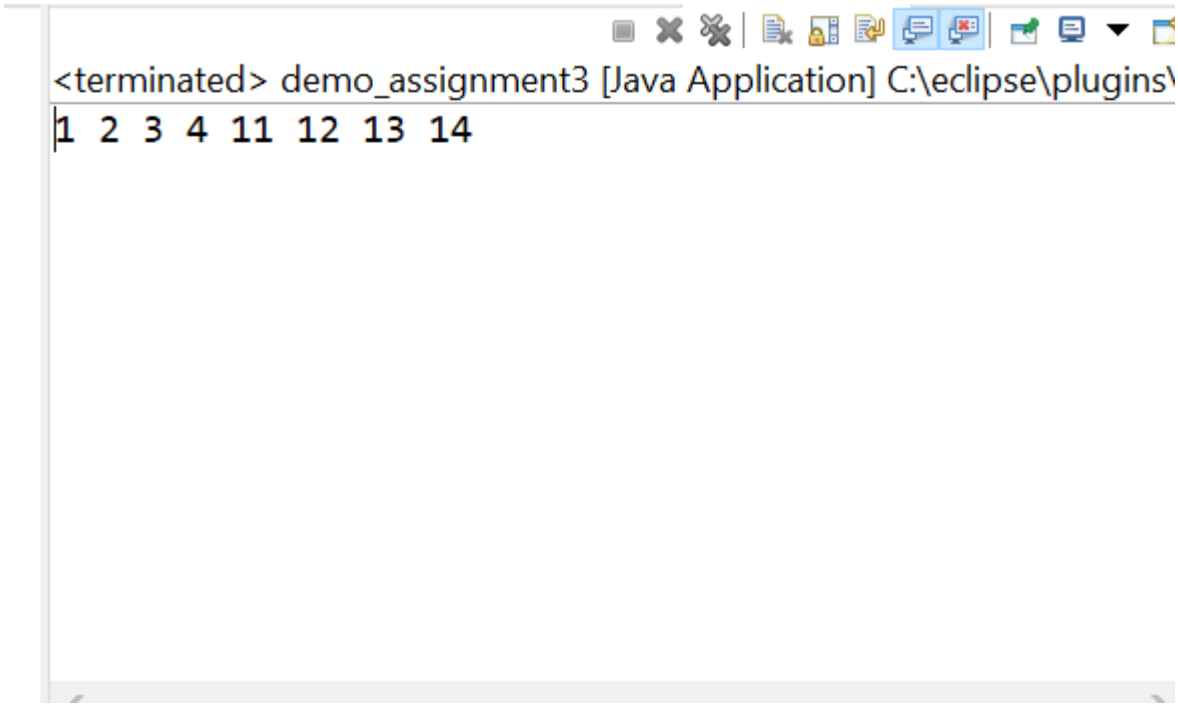
Q-37)

```
import java.util.ArrayList;
import java.util.Arrays;
import java.util.Scanner;
public static void main(String[] args) {
		System.out.println("Enter Year- ");
		Scanner sc= new Scanner(System.in);
		int year= sc.nextInt();
		if(((year%4==0) && (year%100!=0)) || (year%400==0))
		System.out.println("leap-year");
		else
		System.out.println("not a leap-year");
	}
```



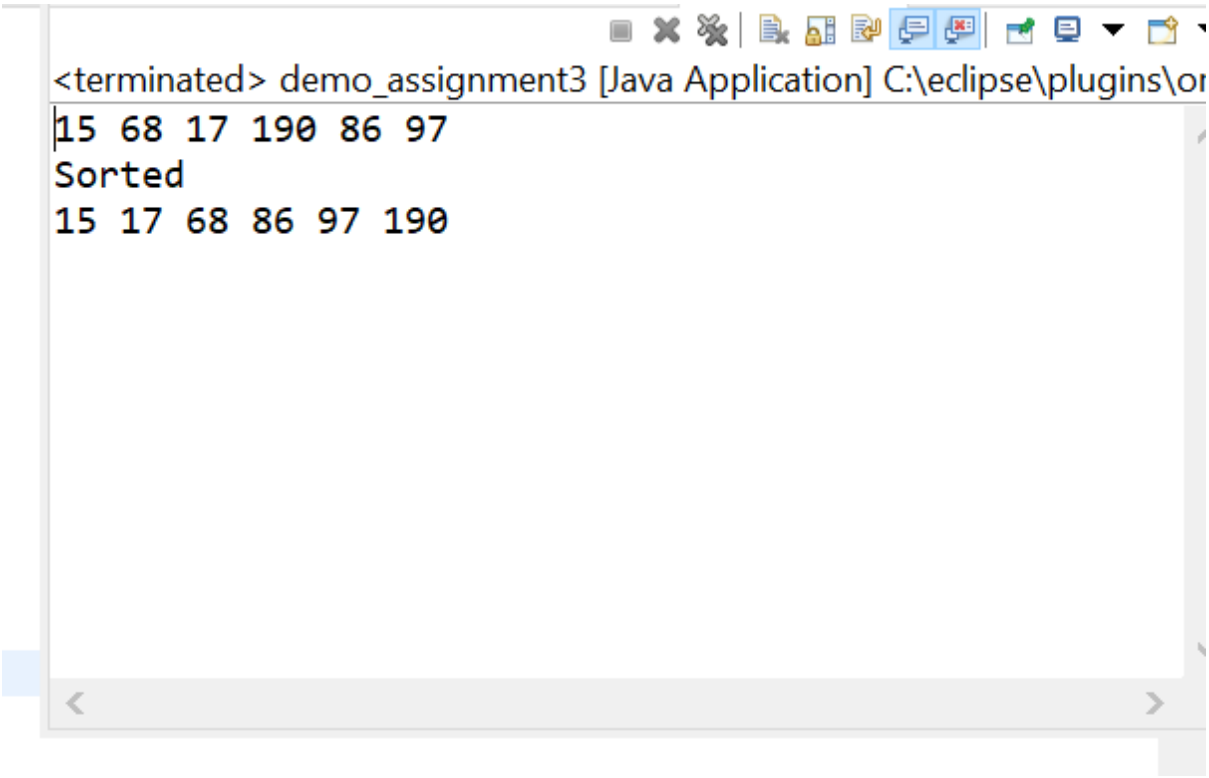
Q-38)

```
import java.util.ArrayList;
import java.util.Arrays;
import java.util.Scanner;
public static void main(String[] args) {
            ArrayList<Integer> a1=new ArrayList<Integer>();
            ArrayList<Integer> a2=new ArrayList<Integer>();
            ArrayList<Integer> a3=new ArrayList<Integer>();
        a1.add(1);
        a1.add(2);
        a1.add(3);
        a1.add(4);
        a2.add(11);
        a2.add(12);
        a2.add(13);
        a2.add(14);
        a1.forEach(n -> a3.add(n));
        a2.forEach(n -> a3.add(n));
        a3.forEach(n -> System.out.println(n));
          }
```



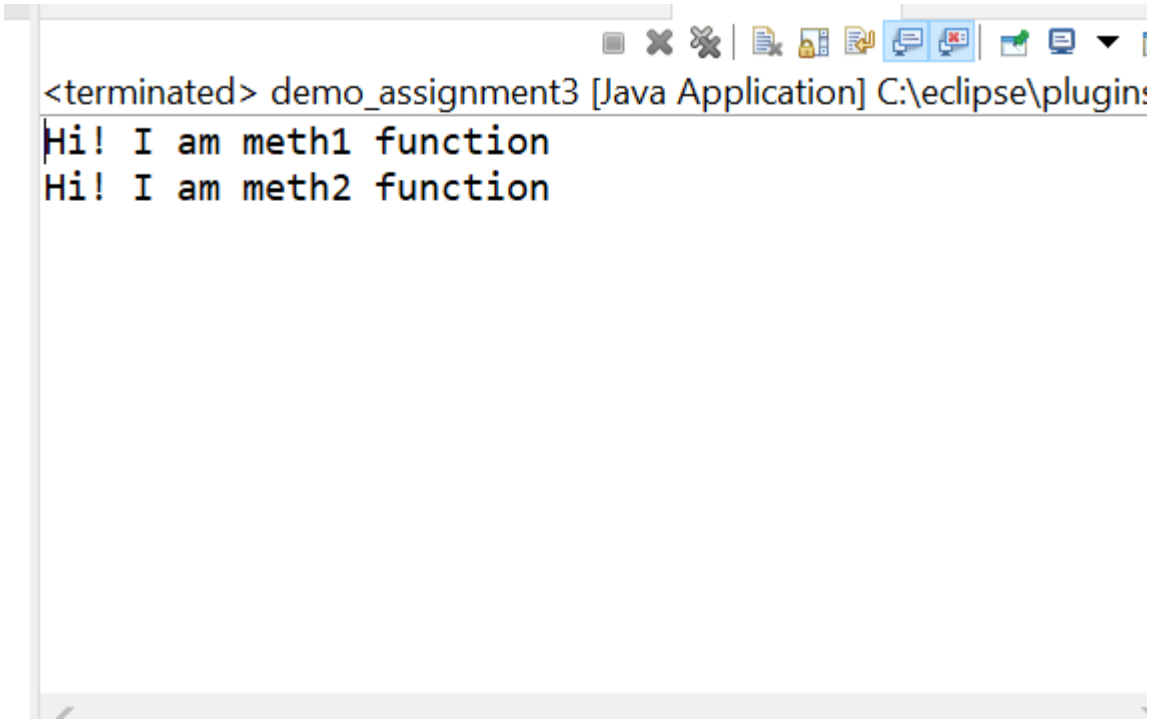
Q-39)

```
import java.util.ArrayList;
import java.util.Arrays;
import java.util.Scanner;
public static void main(String[] args) {
              int[] a1 = {15,68,17,190,86,97};
               for (int i:a1)
               System.out.print(i+" ");
               Arrays.parallelSort(a1);
               System.out.println("\nSorted");
               for (int i:a1)
               System.out.print(i+" ");

      }
```



Q-40)

```
import java.util.ArrayList;
import java.util.Arrays;
import java.util.Scanner;
interface A
{
    void meth1();
    void meth2();
}
class MyClass implements A
{
	public void meth1() {
		System.out.println("Hi! I am meth1 function");
	}
	public void meth2() {
		System.out.println("Hi! I am meth2 function");
	}

}
public class demo_assignment3 {


	public static void main(String[] args) {
		 MyClass ob=new MyClass();
		 ob.meth1();
		 ob.meth2();

	}
}
```


<terminated> demo_assignment3 [Java Application] C:\eclipse\plugins
Hi! I am meth1 function
Hi! I am meth2 function