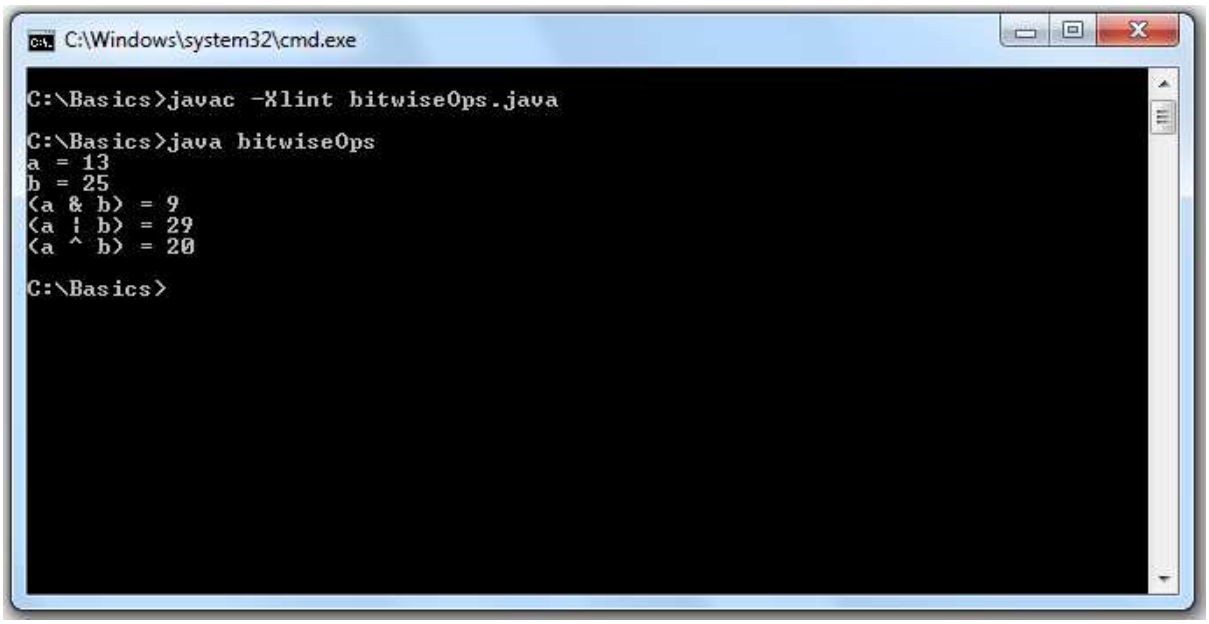
1) Write a program that will use bitwise & operator to perform bitwise AND operation,bitwise operator to perform bitwise inclusive OR operation ans bitwise ^ operator to perform bitwise exclusive OR operation

Program:-

```
class bitwiseOps

{

        public static void main(String argv[])

        {

                int a=13,b=25;

                System.out.println("a = "+a);

                System.out.println("b = "+b);

                System.out.println("(a & b) = "+(a&b));

                System.out.println("(a | b) = "+(a|b));

                System.out.println("(a ^ b) = "+(a^b));

        }

}
```

Output:-

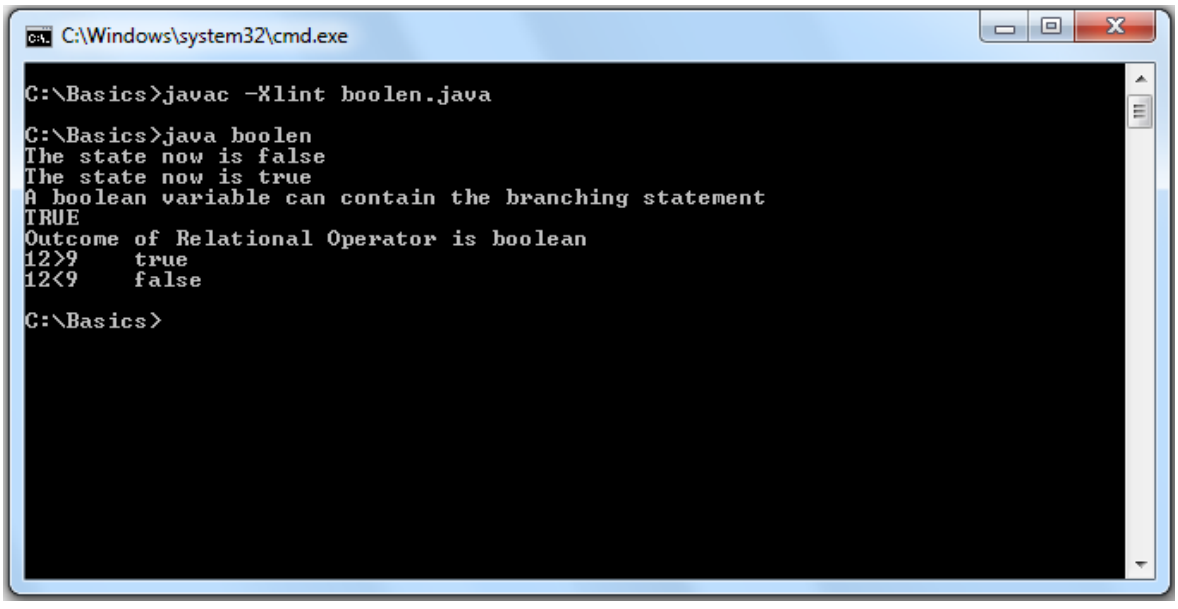


2) Write a program to demonstrate Boolean variable in JAVA and also show that they are compatible with relational operators

Program:-

```
class boolen
{
	public static void main(String argv[])
	{
		boolean state;
		state=false;
		System.out.println("The state now is "+state);
		state=true;
		System.out.println("The state now is "+state);
		System.out.println("A boolean variable can contain the branching statement");
		if(state)
			System.out.println("TRUE");
		System.out.println("Outcome of Relational Operator is boolean");
		System.out.println("12>9\t"+(12>9));
		System.out.println("12<9\t"+(12<9));
	}
}
```

Output:-



3) Write a program to to demonstrate character variables in JAVA also show that in ceratin situations they behave like integers

Program:-

```
class chrctr

{

        public static void main(String argv[])

        {

                char a1='a',a2=65;

                System.out.println("The value of a1 is = "+a1);

                System.out.println("The value of a2 is = "+a2);

                System.out.println("Character variables sometimes behaves like Integers =
                ");

                a1++;

                a2++;

                System.out.println("The value of a1++ is = "+a1);

                System.out.println("The value of a2++ is = "+a2);

        }

}
```

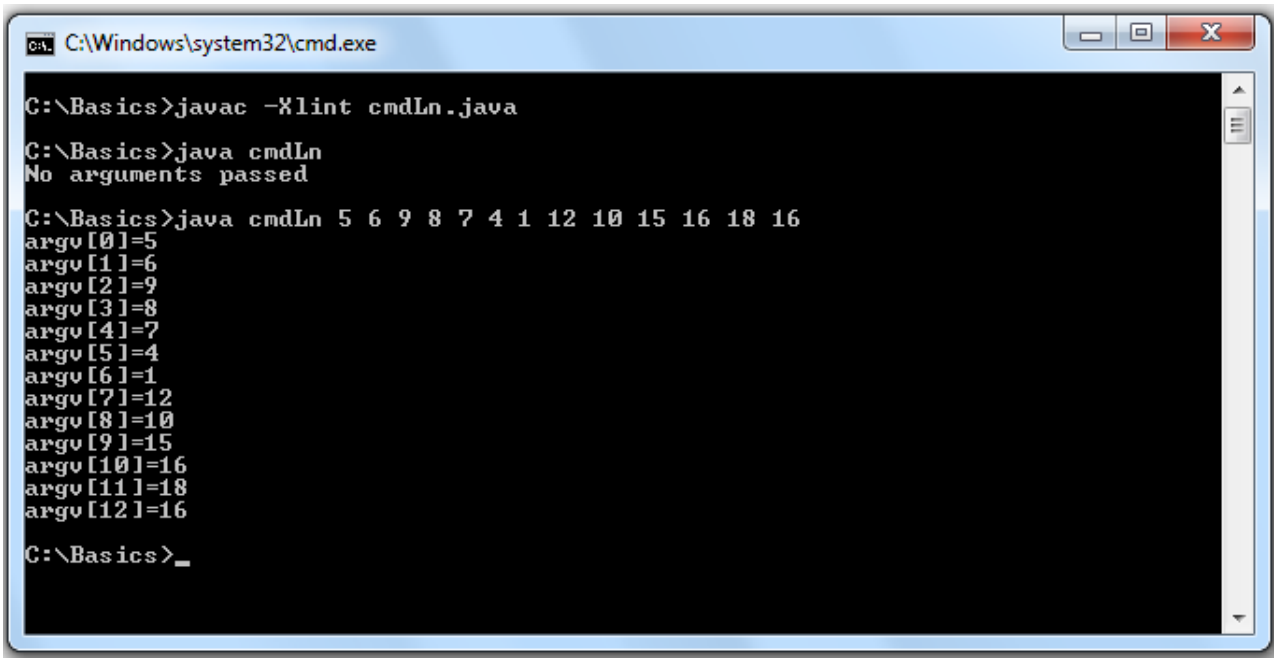
Output:-

4) Write a program to demonstrate comand line arguments

Program:-

```
class cmdLn
{
        public static void main(String argv[])
        {
                int n=0;
                if(argv.length == 0)
                        System.out.println("No arguments passed");
                for(int i=0;i<argv.length;i++)
                {
                        n=Integer.parseInt(argv[i]);
                        System.out.println("argv["+i+"]="+n);
                }
        }
}
```

Output:-

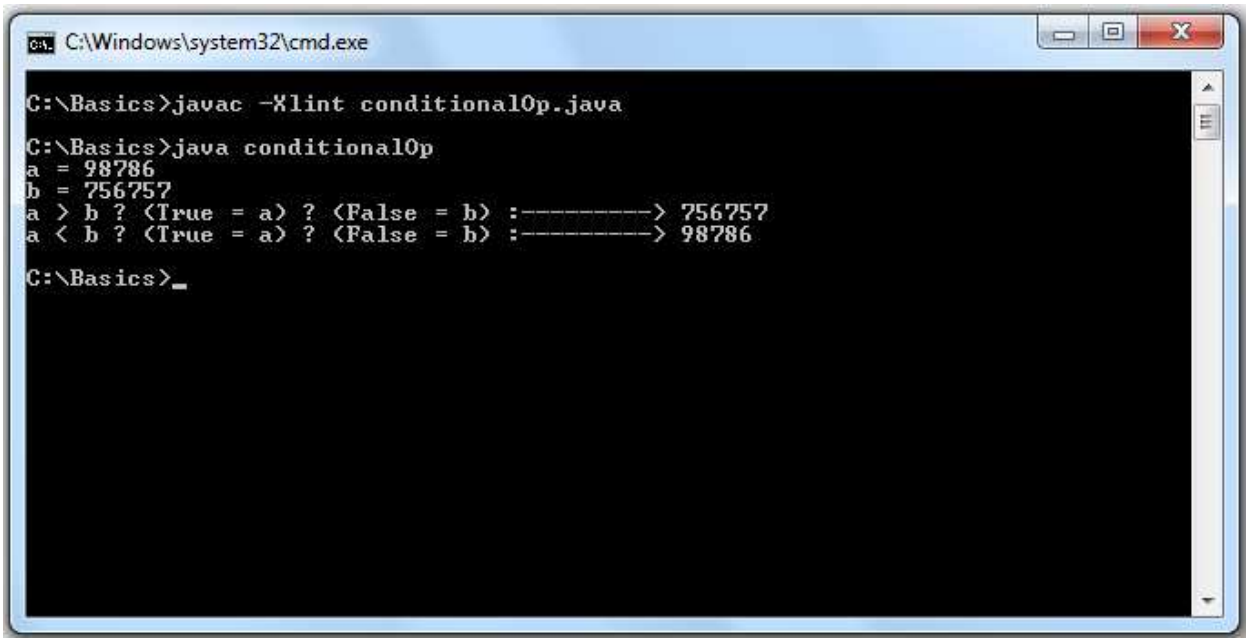


5) Write a program to to demonstrate the working of conditional operators in JAVA

Program:-

```
class conditionalOp
{
	public static void main(String argv[])
	{
		int a,b;
		a=98786;
		b=756757;
		System.out.println("a = "+a+"\nb = "+b);
		System.out.println("a > b ? (True = a) ? (False = b) :---------> "+(a>b?a:b));
		System.out.println("a < b ? (True = a) ? (False = b) :---------> "+(a<b?a:b));
	}
}
```

Output:-

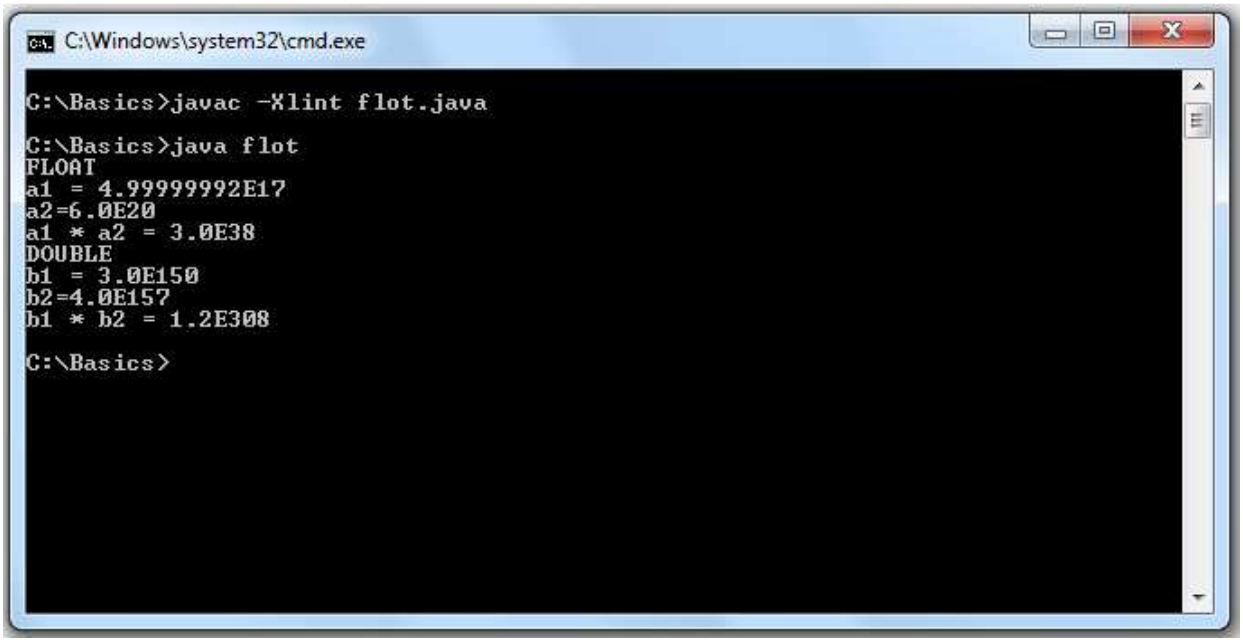


6) To demonstrate all the Float(float,double) types available in JAVA

Program:-

```
class flot
{
        public static void main(String args[])
        {
                float a1,a2;
                double b1,b2;
                a1=5e+17f;
                a2=6e+20f;
                System.out.println("FLOAT\na1 = "+a1+"\na2="+a2+"\na1 * a2 = "+a1*a2);
                b1=3e+150;
                b2=4e+157;
                System.out.println("DOUBLE\nb1 = "+b1+"\nb2="+b2+"\nb1 * b2 =
                "+b1*b2);
        }
}
```

Output:-

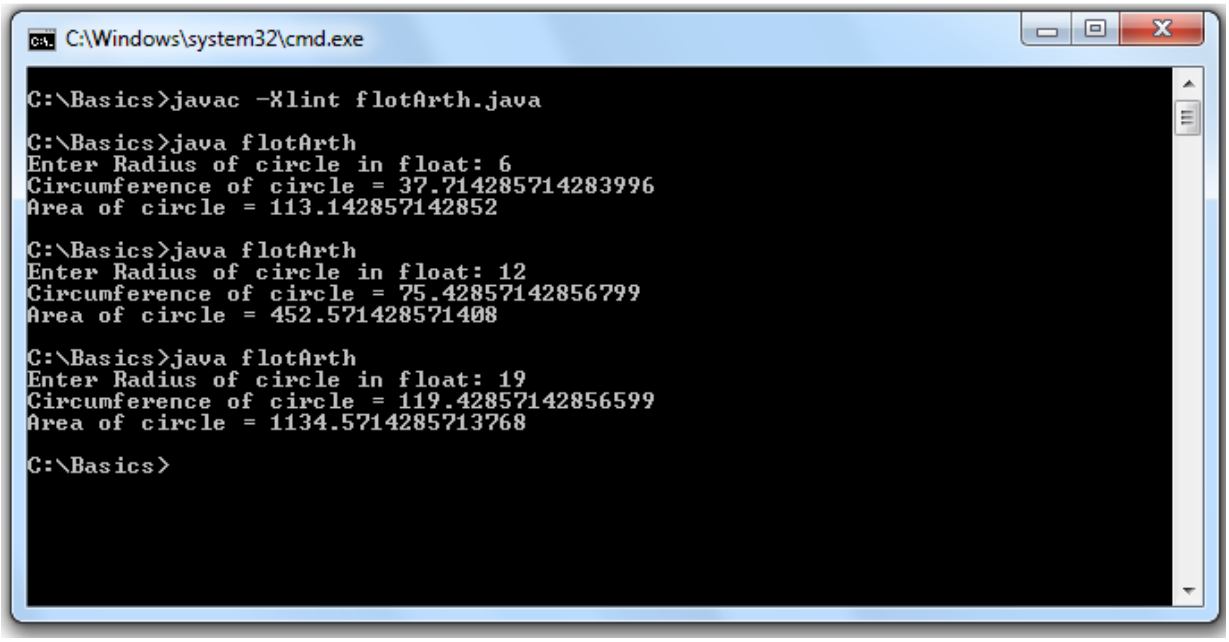


7) Write a program to to demonstrate the Float arithmetic operations performed in JAVA

Program:-

```
import java.util.Scanner;

class flotArth

{

        public static void main(String argv[])

        {

                Scanner in = new Scanner(System.in);

                float r=0.0f;

                double pi=3.142857142857,cir=0.0f,area=0.0f;

                System.out.print("Enter Radius of circle in float: ");

                r=in.nextFloat();

                cir=2*pi*r;

                area=pi*r*r;

                System.out.println("Circumference of circle = "+cir+"\nArea of circle =
                "+area);

        }

}
```

Output:-



8) Write a program to demonstrate the Integer arithmetic operations performed in JAVA

Program:-

```
import java.util.Scanner;
class intArth
{
	public static void main(String args[])
	{
		Scanner in = new Scanner(System.in);
		int lengthr=0,breadthr=0,lengths=0,areas,arear,peris,perir;
		System.out.print("Enter length of square in integer: ");
		lengths=in.nextInt();
		System.out.print("Enter length of rectangle in integer: ");
		lengthr=in.nextInt();
		System.out.print("Enter breadth of rectangle in integer: ");
		breadthr=in.nextInt();
		areas=lengths*lengths;
		arear=lengthr*breadthr;
		peris=4*lengths;
		perir=2*(lengthr+breadthr);
		System.out.println("Square\nPerimeter = "+peris+"\nArea = "+areas);
		System.out.println("Rectangle\nPerimeter = "+perir+"\nArea = "+arear);
	}
}
```

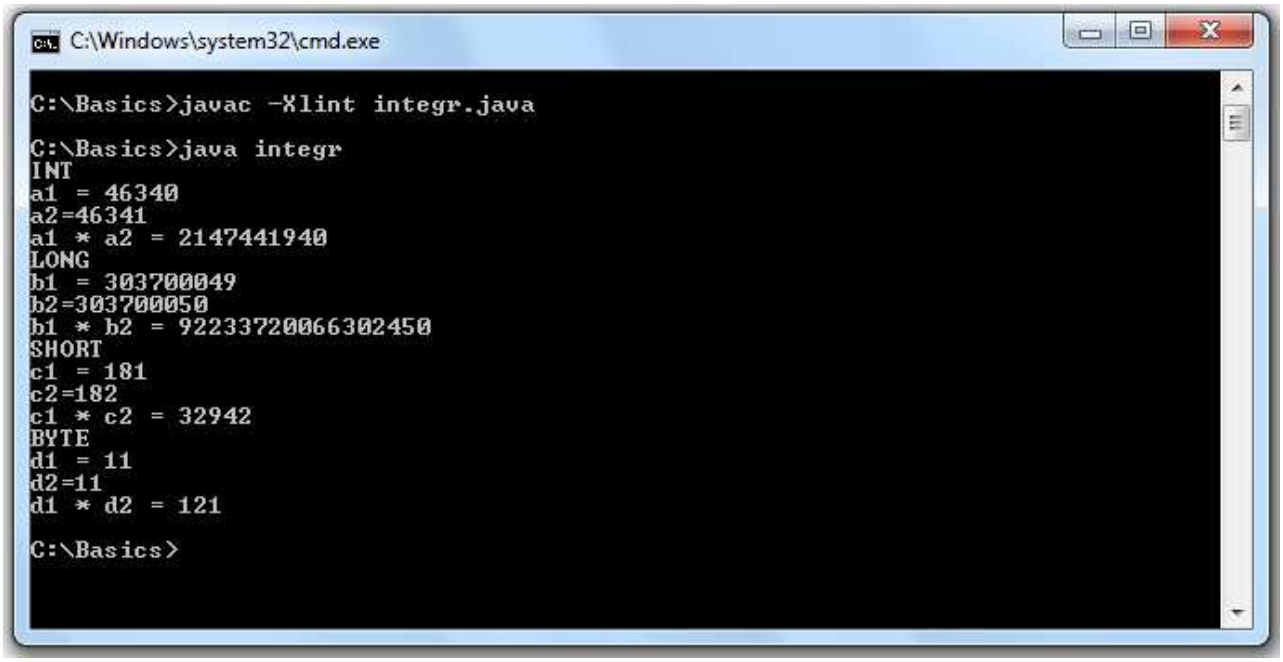
Output:-


C:\Windows\system32\cmd.exe
C:\Basics>javac -Xlint intArth.java
C:\Basics>java intArth
Enter length of square in integer: 9
Enter length of rectangle in integer: 15
Enter breadth of rectangle in integer: 21
Square
Perimeter = 36
Area = 81
Rectangle
Perimeter = 72
Area = 315
C:\Basics>

9) To demonstrate all the Integer(short,int,long,byte) types available in JAVA

```
class integr
{
	public static void main(String args[])
	{
		int a1,a2;
		long b1,b2;
		short c1,c2;
		byte d1,d2;
		a1=46340;
		a2=46341;
		System.out.println("INT\na1 = "+a1+"\na2="+a2+"\na1 * a2 = "+a1*a2);
		b1=303700049;
		b2=303700050;
		System.out.println("LONG\nb1 = "+b1+"\nb2="+b2+"\nb1 * b2 = "+b1*b2);
		c1=181;
		c2=182;
		System.out.println("SHORT\nc1 = "+c1+"\nc2="+c2+"\nc1 * c2 = "+c1*c2);
		d1=11;
		d2=11;
		System.out.println("BYTE\nd1 = "+d1+"\nd2="+d2+"\nd1 * d2 = "+d1*d2);
	}
}
```

Output:-

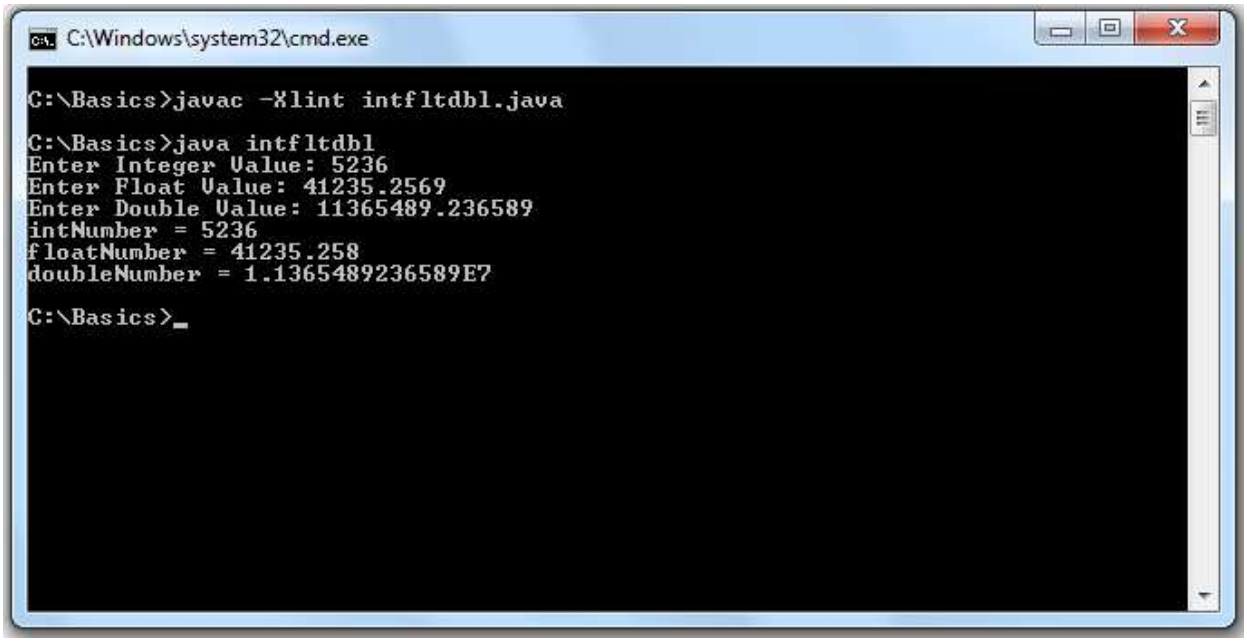

C:\Windows\system32\cmd.exe
C:\Basics>javac -Xlint integr.java
C:\Basics>java integr
INT
a1 = 46340
a2=46341
a1 * a2 = 2147441940
LONG
b1 = 303700049
b2=303700050
b1 * b2 = 92233720066302450
SHORT
c1 = 181
c2=182
c1 * c2 = 32942
BYTE
d1 = 11
d2=11
d1 * d2 = 121
C:\Basics>

10) Write a program that will take int,float and double values given by user and display them

Program:-

```
import java.util.Scanner;
class intfltdbl
{
	public static void main(String argv[])
	{
		Scanner in = new Scanner(System.in);
		int intNumber=0;
		float floatNumber=0.0f;
		double doubleNumber=0.0;
		System.out.print("Enter Integer Value: ");
		intNumber=in.nextInt();
		System.out.print("Enter Float Value: ");
		floatNumber=in.nextFloat();
		System.out.print("Enter Double Value: ");
		doubleNumber=in.nextDouble();
		System.out.println("intNumber = "+intNumber);
		System.out.println("floatNumber = "+floatNumber);
		System.out.println("doubleNumber = "+doubleNumber);
	}
}
```

Output:-


C:\Windows\system32\cmd.exe
C:\Basics>javac -Xlint intfltdbl.java
C:\Basics>java intfltdbl
Enter Integer Value: 5236
Enter Float Value: 41235.2569
Enter Double Value: 11365489.236589
intNumber = 5236
floatNumber = 41235.258
doubleNumber = 1.1365489236589E7
C:\Basics>

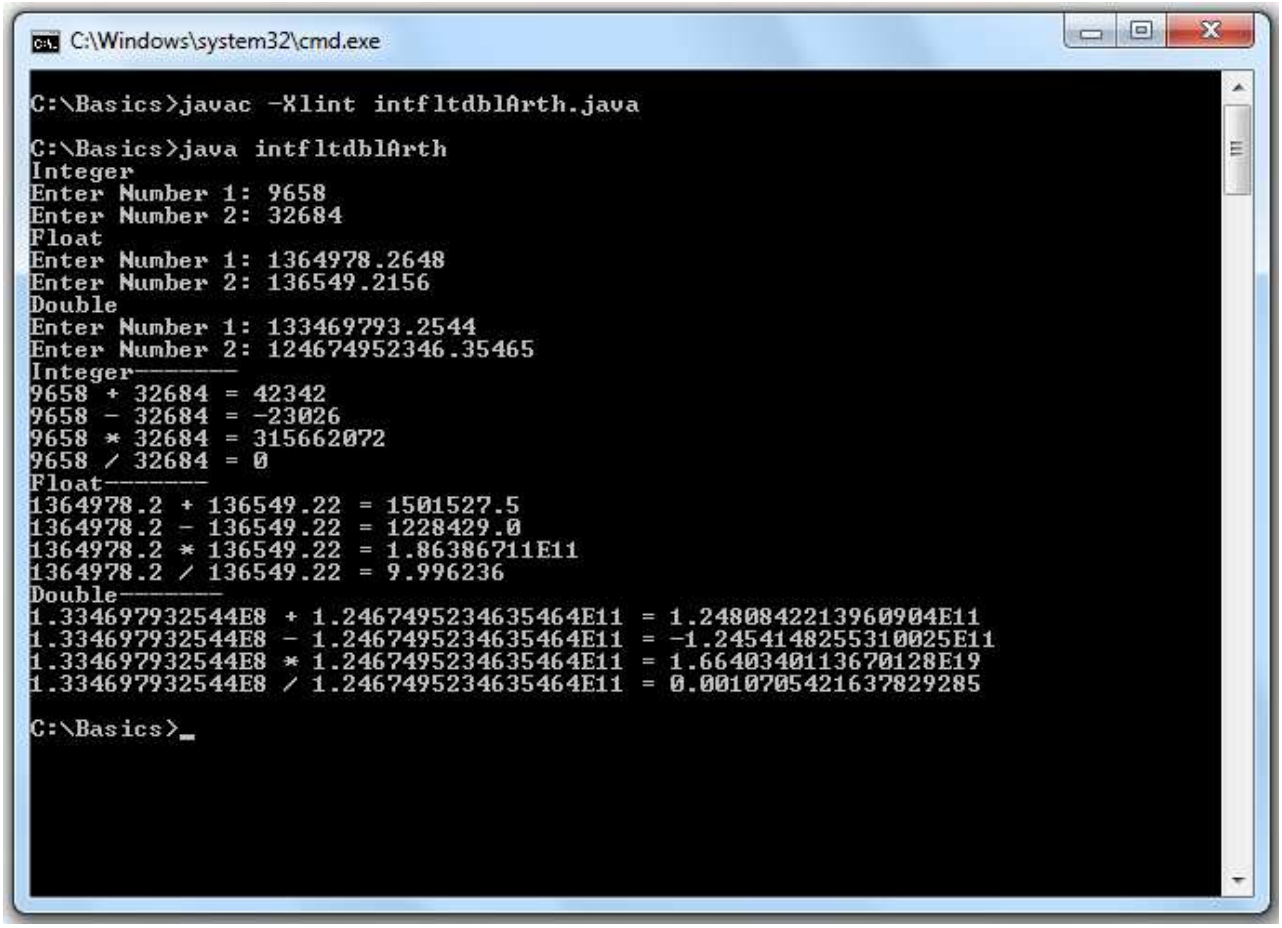
11) Write a program that will demonstrate arithmetic operations performed with int,float and double values given by user

Program:-

```
import java.util.Scanner;

class intfltdblArth

{

        public static void main(String argv[])

        {

                Scanner in = new Scanner(System.in);

                int resulti=0,intNumber1=0,intNumber2=0;

                float resultf=0.0f,floatNumber1=0.0f,floatNumber2=0.0f;

                double resultd=0.0,doubleNumber1=0.0,doubleNumber2=0.0;

                System.out.print("Integer\nEnter Number 1: ");

                intNumber1=in.nextInt();

                System.out.print("Enter Number 2: ");

                intNumber2=in.nextInt();

                System.out.print("Float\nEnter Number 1: ");

                floatNumber1=in.nextFloat();

                System.out.print("Enter Number 2: ");

                floatNumber2=in.nextFloat();

                System.out.print("Double\nEnter Number 1: ");

                doubleNumber1=in.nextDouble();

                System.out.print("Enter Number 2: ");

                doubleNumber2=in.nextDouble();


                resulti=intNumber1+intNumber2;

                System.out.println("Integer-------\n"+intNumber1+" + "+intNumber2+" =
                "+resulti);

                resulti=intNumber1-intNumber2;

                System.out.println(intNumber1+" - "+intNumber2+" = "+resulti);

                resulti=intNumber1*intNumber2;
```

```
                System.out.println(intNumber1+" * "+intNumber2+" = "+resulti);

                resulti=intNumber1/intNumber2;

                System.out.println(intNumber1+" / "+intNumber2+" = "+resulti);


                resultf=floatNumber1+floatNumber2;

                System.out.println("Float-------\n"+floatNumber1+" + "+floatNumber2+" =
                "+resultf);

                resultf=floatNumber1-floatNumber2;

                System.out.println(floatNumber1+" - "+floatNumber2+" = "+resultf);

                resultf=floatNumber1*floatNumber2;

                System.out.println(floatNumber1+" * "+floatNumber2+" = "+resultf);

                resultf=floatNumber1/floatNumber2;

                System.out.println(floatNumber1+" / "+floatNumber2+" = "+resultf);


                resultd=doubleNumber1+doubleNumber2;

                System.out.println("Double-------\n"+doubleNumber1+" +
                "+doubleNumber2+" = "+resultd);

                resultd=doubleNumber1-doubleNumber2;

                System.out.println(doubleNumber1+" - "+doubleNumber2+" = "+resultd);

                resultd=doubleNumber1*doubleNumber2;

                System.out.println(doubleNumber1+" * "+doubleNumber2+" = "+resultd);

                resultd=doubleNumber1/doubleNumber2;

                System.out.println(doubleNumber1+" / "+doubleNumber2+" = "+resultd);

        }

}
```

Output:-

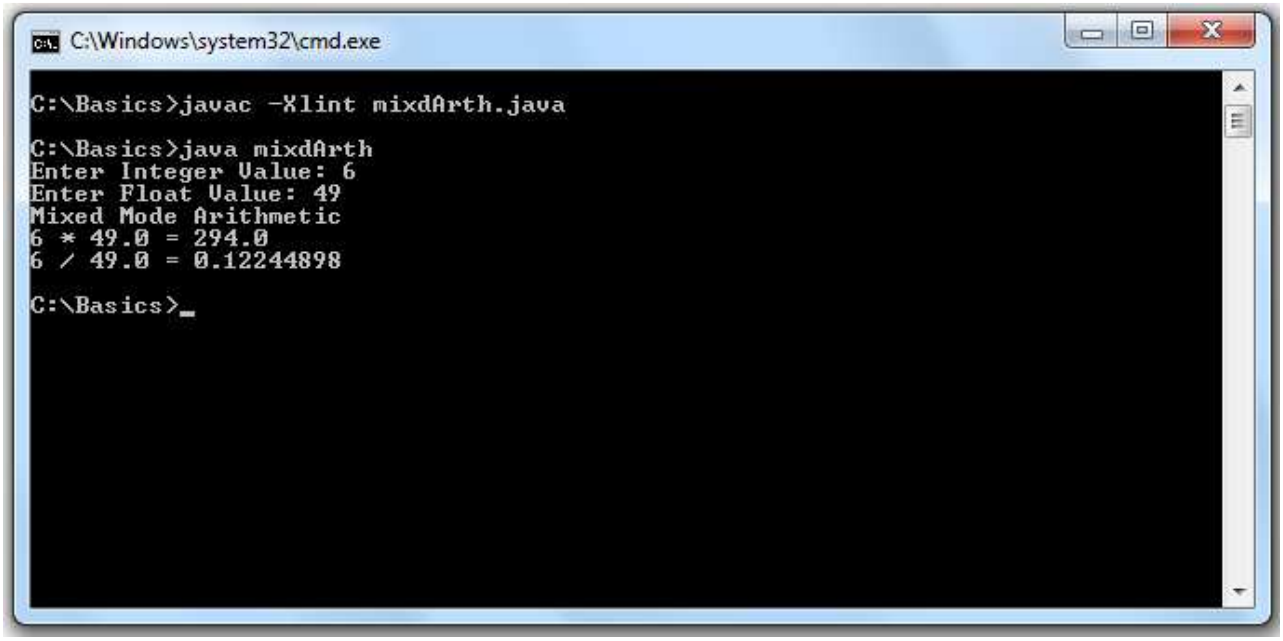

C:\Windows\system32\cmd.exe
C:\Basics>javac -Xlint intfltdblArth.java
C:\Basics>java intfltdblArth
Integer
Enter Number 1: 9658
Enter Number 2: 32684
Float
Enter Number 1: 1364978.2648
Enter Number 2: 136549.2156
Double
Enter Number 1: 133469793.2544
Enter Number 2: 124674952346.35465
Integer--------
9658 + 32684 = 42342
9658 - 32684 = -23026
9658 * 32684 = 315662072
9658 / 32684 = 0
Float--------
1364978.2 + 136549.22 = 1501527.5
1364978.2 - 136549.22 = 1228429.0
1364978.2 * 136549.22 = 1.86386711E11
1364978.2 / 136549.22 = 9.996236
Double--------
1.334697932544E8 + 1.2467495234635464E11 = 1.2480842213960904E11
1.334697932544E8 - 1.2467495234635464E11 = -1.2454148255310025E11
1.334697932544E8 * 1.2467495234635464E11 = 1.6640340113670128E19
1.334697932544E8 / 1.2467495234635464E11 = 0.0010705421637829285
C:\Basics>

12) Write a program to demonstrate the Mixed mode arithmetic operation performed inJAVA

Program:-

```
import java.util.Scanner;

class mixdArth

{

        public static void main(String argv[])

        {

                Scanner in = new Scanner(System.in);

                int intNumber=0;

                float floatNumber=0.0f;

                System.out.print("Enter Integer Value: ");

                intNumber=in.nextInt();

                System.out.print("Enter Float Value: ");

                floatNumber=in.nextFloat();

                System.out.println("Mixed Mode Arithmetic\n"+intNumber+" *
                "+floatNumber+" = "+(intNumber*floatNumber)+"\n"+intNumber+" /
                "+floatNumber+" = "+(intNumber/floatNumber));

        }

}
```

Output:-

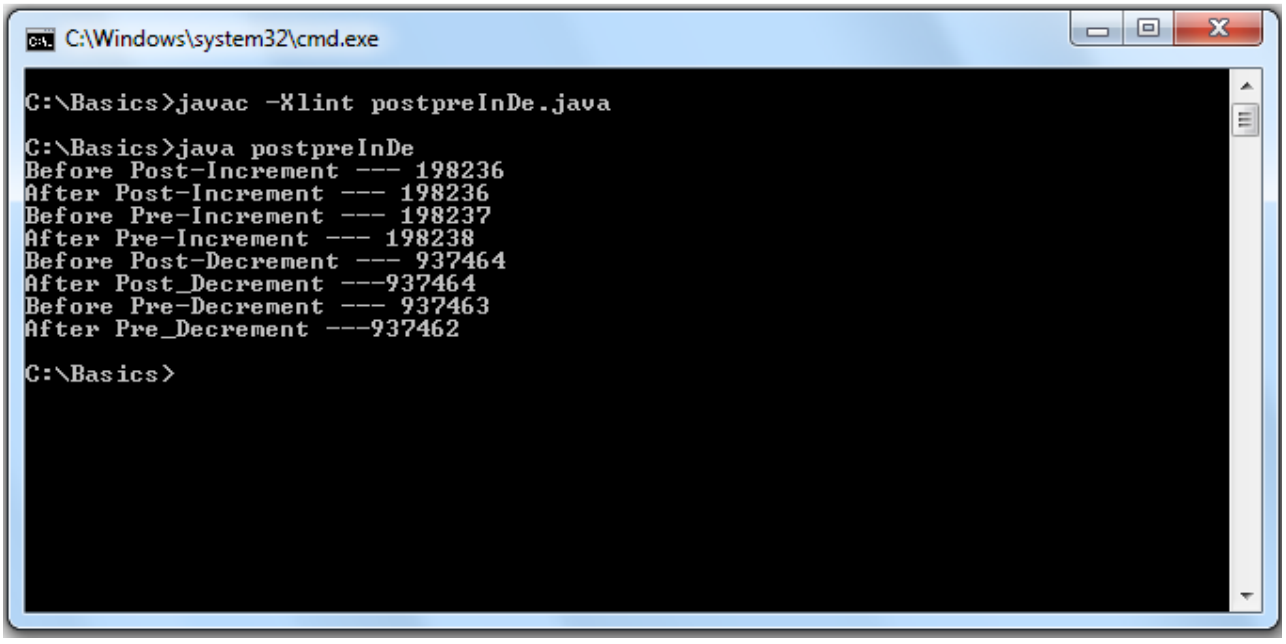


13) Write a program to demonstrate pre-increment and post-increment operation with an integer.Also perform decrement operation in the same way

Program:-

```
class postpreInDe

{

        public static void main(String argv[])

        {

                int intNumber;

                intNumber=198236;

                System.out.println("Before Post-Increment --- "+intNumber+"\nAfter Post-Increment --- "+(intNumber++));

                System.out.println("Before Pre-Increment --- "+intNumber+"\nAfter Pre-Increment --- "+(++intNumber));

                intNumber=937464;

                System.out.println("Before Post-Decrement --- "+intNumber+"\nAfter Post_Decrement ---"+(intNumber--));

                System.out.println("Before Pre-Decrement --- "+intNumber+"\nAfter Pre_Decrement ---"+(--intNumber));

        }

}
```

Output:-

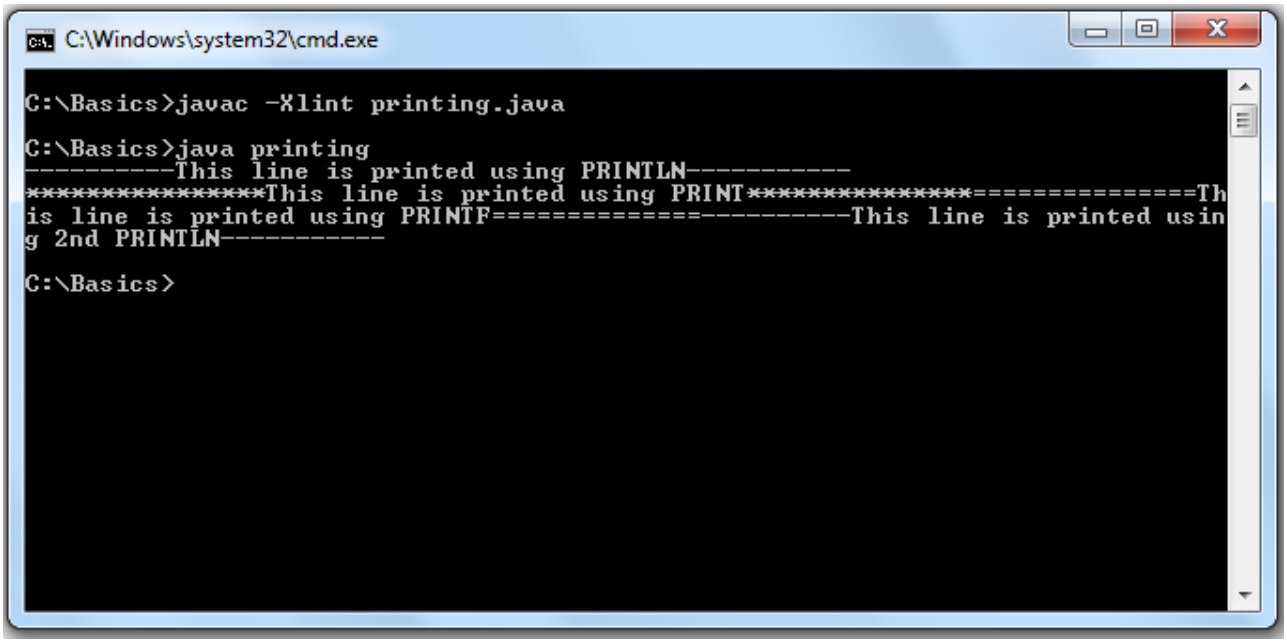


14) Write a program to demonstrate the printing facility provided by JAVA(use of print,printf,println)

Program:-

```
class printing
{       public static void main(String args[])
        {
                System.out.println("----------This line is printed using PRINTLN----------");

                System.out.print("****************This line is printed using
                PRINT***************");

                System.out.printf("===============This line is printed using
                PRINTF==============");

                System.out.println("----------This line is printed using 2nd PRINTLN----------");
        }
}
```

Output:-



15) Write a program to demonstrate the working of relational operators and their evaluation as Boolean in JAVA

Program:-

```
class relationalOp
{
	public static void main(String args[])
	{
		double a=19e199,b=48e150,c=19e199;
		System.out.println("a = "+a+"\nb = "+b+"\nc = "+c);
		System.out.println("a < b = "+(a<b));
		System.out.println("c > b = "+(c>b));
		System.out.println("a == c = "+(a==c));
		System.out.println("a >= c = "+(a>=c));
		System.out.println("a <= b = "+(a<=b));
		System.out.println("a != c = "+(a!=c));
	}
}
```

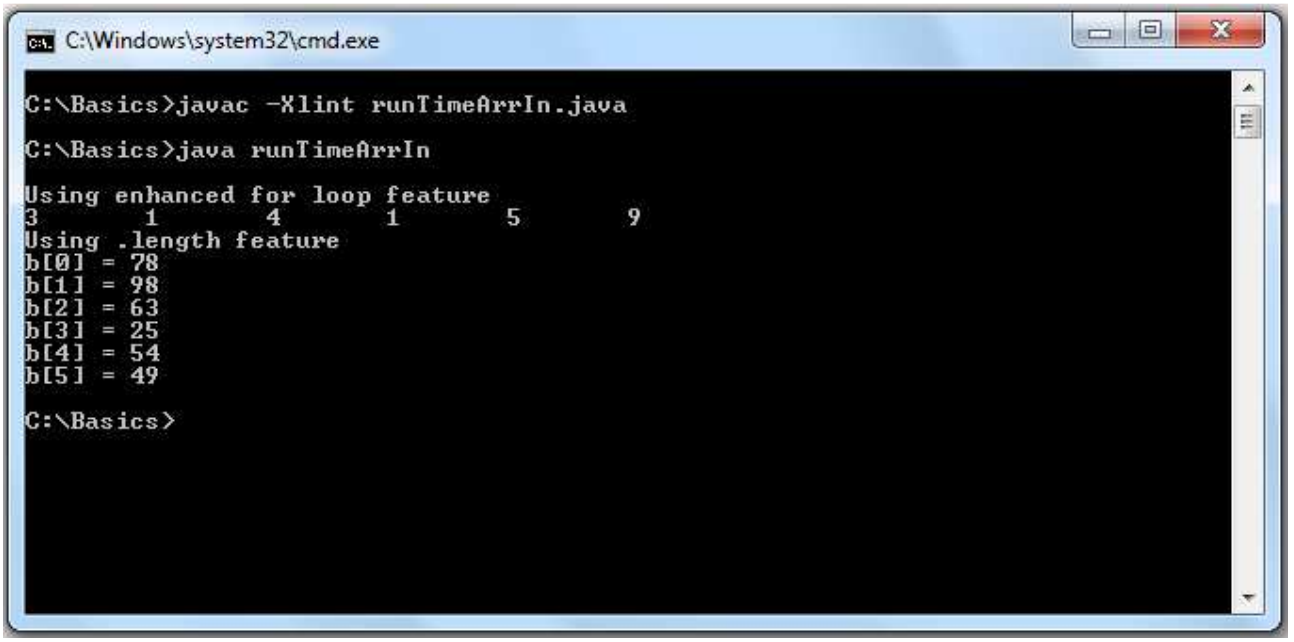
Output:-

16) Write a program that will declare an integer type of array and display its values initialized at compiled time individually

Program:-

```
class runTimeArrIn
{
	public static void main(String argv[])
	{
		int []a = {3,1,4,1,5,9};
		int b[] = {78,98,63,25,54,49};
		System.out.println("\nUsing enhanced for loop feature");
		for(int i:a)
			System.out.print(i+"\t");
		System.out.println("\nUsing .length feature");
		for(int i=0;i<b.length;i++)
			System.out.println("b["+i+"] = "+b[i]);
	}
}
```

Output:-

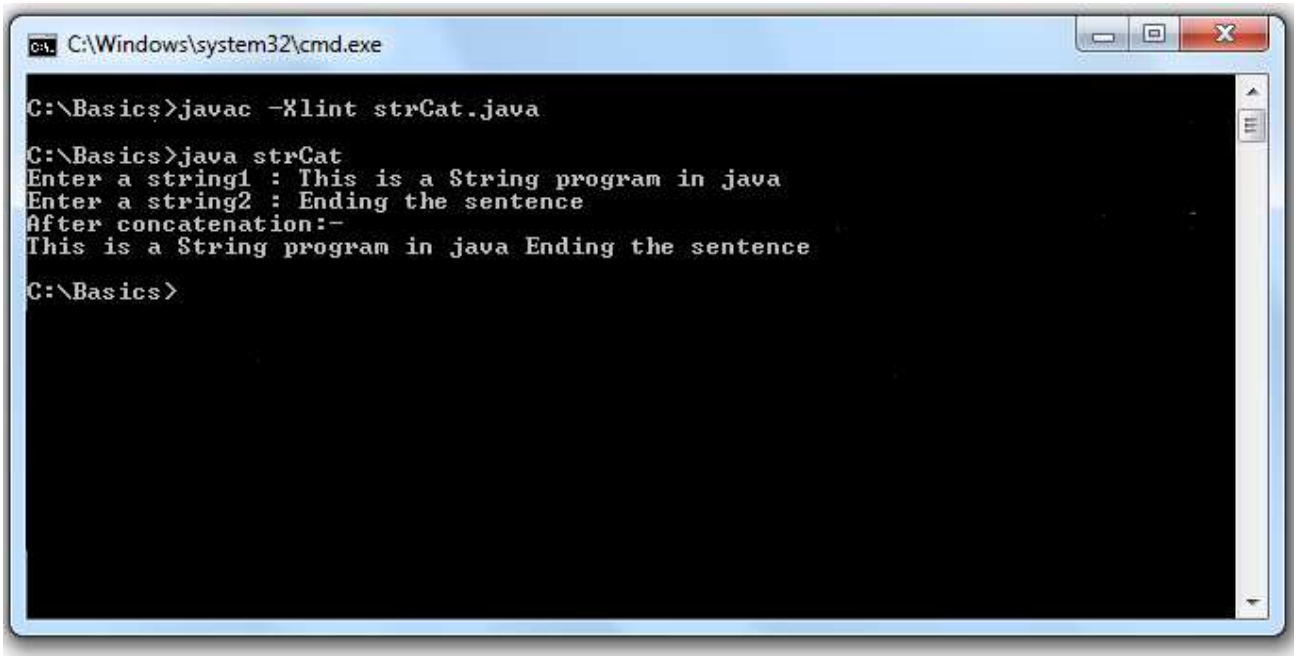


17) Write a program that will perform concatenation of two strings

Program:-

```
import java.io.DataInputStream;
class strCat
{
	public static void main(String argv[])
	{
		DataInputStream in = new DataInputStream(System.in);
		String str1="",str2="";
		try
		{
			System.out.print("Enter a string1 : ");
			str1=in.readLine();
			System.out.print("Enter a string2 : ");
			str2=in.readLine();
		}
		catch(Exception E)
		{
		}
		System.out.println("After concatenation:-\n"+str1+" "+str2);
	}
}
```

Output:-


C:\Windows\system32\cmd.exe
C:\Basics>javac -Xlint strCat.java
C:\Basics>java strCat
Enter a string1 : This is a String program in java
Enter a string2 : Ending the sentence
After concatenation:-
This is a String program in java Ending the sentence
C:\Basics>

18) Write a program that will demonstrate initialization of string by user input

Program:-

```
import java.io.DataInputStream;

class strUserIn

{

        public static void main(String argv[])

        {

                DataInputStream in = new DataInputStream(System.in);

                String str="";

                try

                {

                        System.out.println("Enter a string: ");

                        str=in.readLine();

                }

                catch(Exception E)

                {

                }

                System.out.println("Read string = "+str);

        }

}
```

Output:-

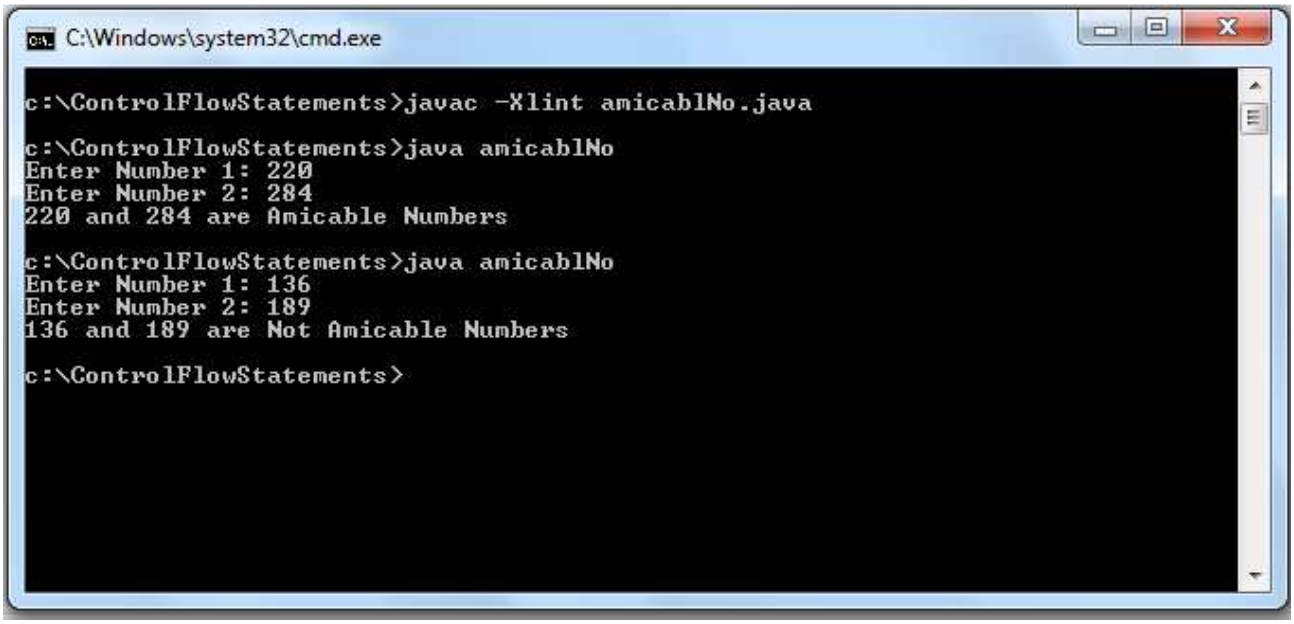
19) Write a program that will take two numbers from the user and check whether they are Amicable numbers or not

Program:-

```
import java.util.Scanner;

class amicablNo

{

        public static void main(String argv[])

        {

                Scanner in = new Scanner(System.in);

                int intNumber1=0,intNumber2=0,div1=0,div2=0,n=0;

                System.out.print("Enter Number 1: ");

                intNumber1=in.nextInt();

                System.out.print("Enter Number 2: ");

                intNumber2=in.nextInt();

                n=intNumber1;

                for(int i=1;i<=n/2;i++)

                {

                        if(n % i == 0)

                                div1=div1+i;

                }

                n=intNumber2;

                for(int i=1;i<=n/2;i++)

                {

                        if(n % i == 0)

                                div2=div2+i;

                }

                if(intNumber1 == div2 && intNumber2 == div1)

                        System.out.println(intNumber1+" and "+intNumber2+" are
                        Amicable Numbers");

                else
```

```
                    System.out.println(intNumber1+" and "+intNumber2+" are Not
                    Amicable Numbers");

        }

}
```

OutPut:-



20) Write a program that will check whether a number is Armstrong number or not

Program:-

```
import java.util.Scanner;
class armstrng
{
	public static void main(String argv[])
	{
		Scanner in = new Scanner(System.in);
		int s=0,intNumber=0,n,b=0,x=0,a=1;
		System.out.print("Enter Integer Value: ");
		intNumber=in.nextInt();
		n=intNumber;
		while(n >= 1)
		{
			n=n/10;
			x++;
		}
		n=intNumber;
		while(n >= 1)
		{
			b=n%10;
			n=n/10;
			a=1;
			for(int i=1;i<=x;i++)
				a=a*b;
			s=s+a;
		}
		if(s == intNumber)
			System.out.println(intNumber+" is an Armstromg Number");
		else
```

```
                System.out.println(intNumber+" is Not an Armstromg Number");
        }
}
```

Output:-

21) Write a program to demonstrate the Enhanced For Loop in JAVA

Program:-

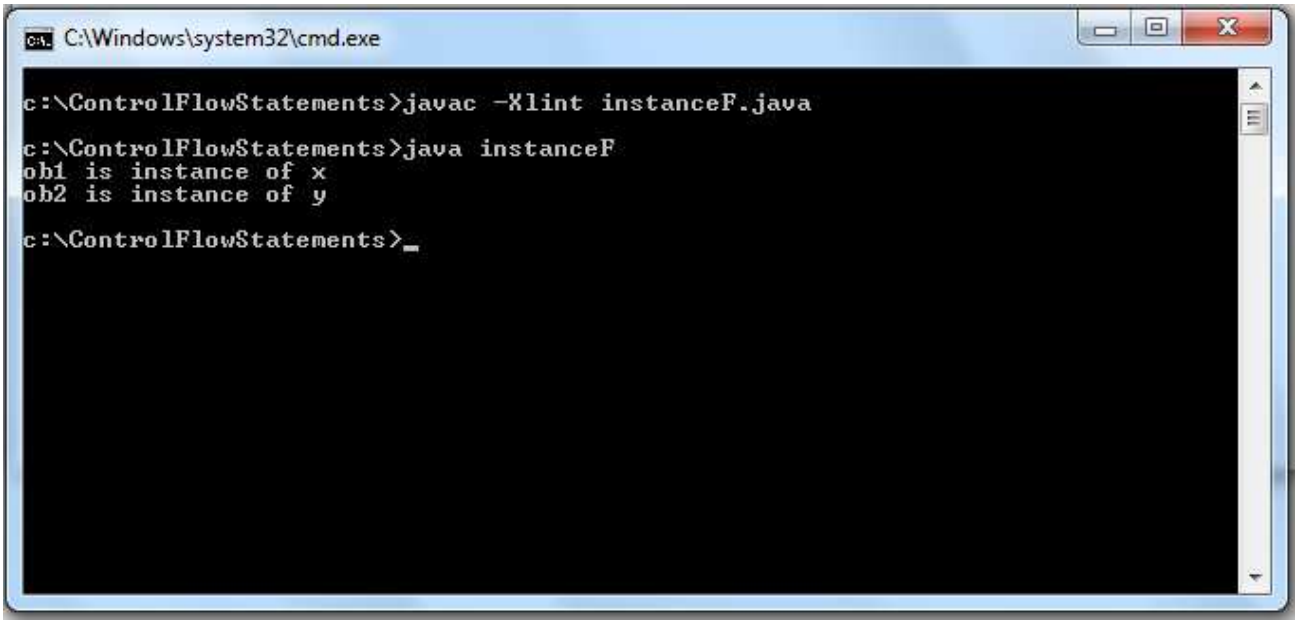
```
class enForLoop
{
	public static void main(String argv[])
	{

		int x=0;
		int arr[]={49,93,85,73,82,8,27};
		System.out.println("Displaying Array elements using Enhanced For Loop:----------");
		for(int i:arr)
		{
			++x;
			System.out.println("array["+x+"] = "+i);
		}
	}
}
```

Output:-

22) Write a program that will demonstrate instanceOf operator in JAVA

```
class x
{
        x()
        {
        }
}
class y
{
        y()
        {
        }
}
class instanceF
{
        public static void main(String argv[])
        {
                x ob1 = new x();
                y ob2 = new y();
                if( ob1 instanceof x)
                        System.out.println("ob1 is instance of x ");
                if( ob2 instanceof y)
                        System.out.println("ob2 is instance of y ");
        }
}
```

Output:-


C:\Windows\system32\cmd.exe
c:\ControlFlowStatements>javac -Xlint instanceF.java
c:\ControlFlowStatements>java instanceF
ob1 is instance of x
ob2 is instance of y
c:\ControlFlowStatements>

23) Write a program that will find sum of all the positive integers upto a specified range

Program:-

```
import java.util.Scanner;

class intRange

{

	public static void main(String argv[])

	{

		Scanner in = new Scanner(System.in);

		int i=0,n=0,s=0;

		do

		{

			System.out.print("Enter Range(Positive Integer): ");

			n=in.nextInt();

		}while(n <= 0);

		System.out.println("Intergers upto "+n+" are:-");

		for(i=1;i<=n;i++)

			s=s+i;

		System.out.print("sum till "+i+" = "+s);

	}

}
```

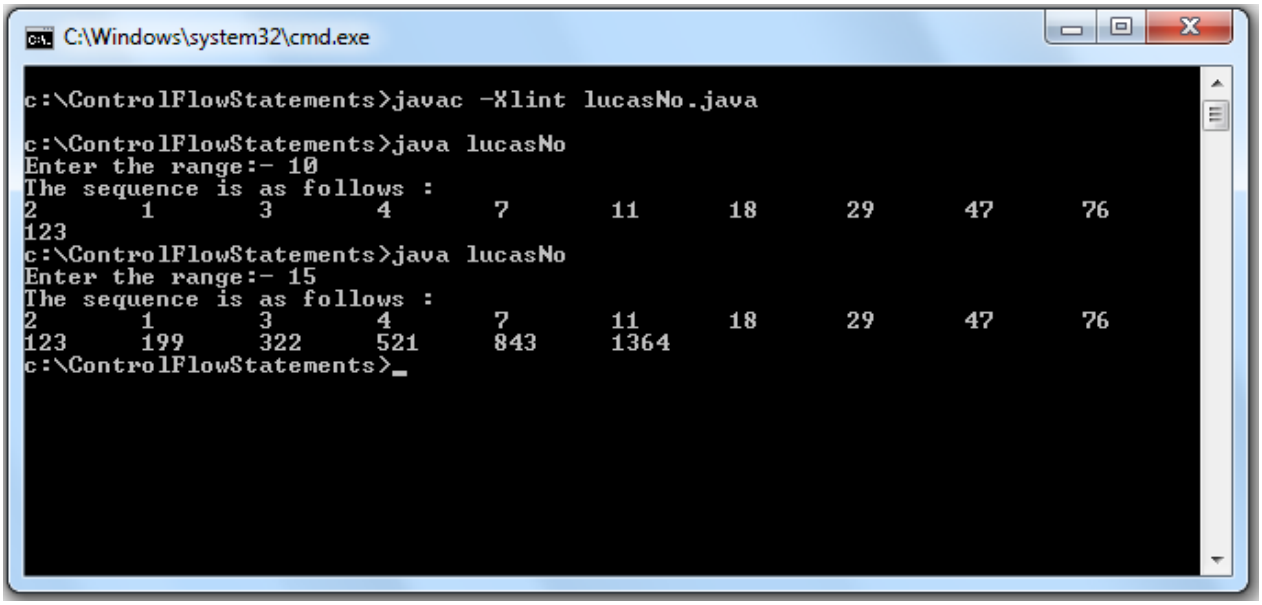
Output:-

24) Write a program that will generate Lucas sequence up to certain range specified by user

Program:-

```
import java.util.Scanner;
class lucasNo
{
	public static void main(String args[])
	{
		Scanner in = new Scanner(System.in);
		int range=0,a=2,b=1,c=0;
		System.out.print("Enter the range:- ");
		range=in.nextInt();
		System.out.println("The sequence is as follows : ");
		System.out.print(a+"\t"+b);
		for(int i=2;i<=range;i++)
		{
			c=a+b;
			System.out.print("\t"+c);
			a=b;
			b=c;
		}
	}
}
```

Output:-


C:\Windows\system32\cmd.exe
c:\ControlFlowStatements>javac -Xlint lucasNo.java
c:\ControlFlowStatements>java lucasNo
Enter the range:- 10
The sequence is as follows :
2 1 3 4 7 11 18 29 47 76
123
c:\ControlFlowStatements>java lucasNo
Enter the range:- 15
The sequence is as follows :
2 1 3 4 7 11 18 29 47 76
123 199 322 521 843 1364
c:\ControlFlowStatements>

25) Write a program that will generate all prime numbers with in Fibonacci series up to certain range

Program:-

```
import java.util.Scanner;

class primeFibo

{

        public static void main(String argv[])

        {

                Scanner in = new Scanner(System.in);

                int a=0,b=1,c=0,n=0,x=0;

                System.out.print("Enter Range: ");

                n=in.nextInt();

                System.out.print("All prime numbers that are also fibonacci
                numbers:\n1\t");

                for(int i=2;i<n;i++)

                {

                        x=0;

                        c=a+b;

                        a=b;

                        b=c;

                        for(int j=1;j <= c/2;j++)

                        {

                                if(c % j == 0)

                                        x++;

                        }

                        if(x == 1)

                                System.out.print(c+"\t");

                }

        }

}
```

Output:-

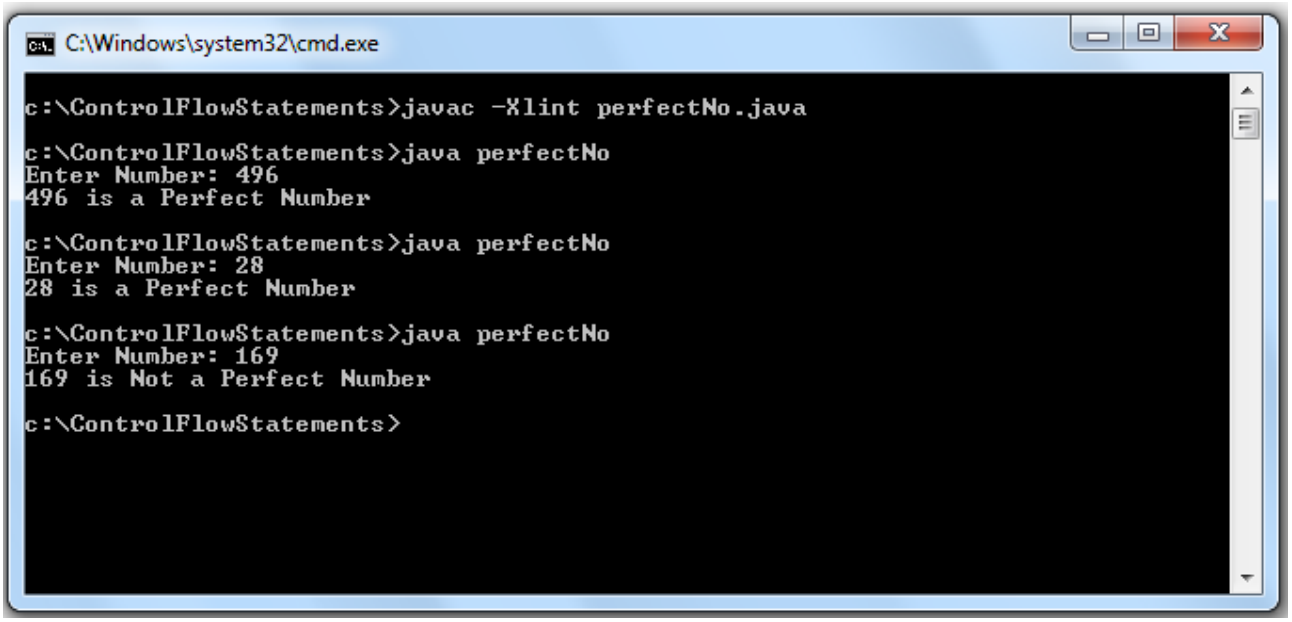

C:\Windows\system32\cmd.exe
c:\ControlFlowStatements>javac -Xlint primeFibo.java
c:\ControlFlowStatements>java primeFibo
Enter Range: 25
All prime numbers that are also fibonacci numbers:
1 2 3 5 13 89 233 1597 28657
c:\ControlFlowStatements>

26) Write a program that will take an integer from the user amd check whether it is perfect number or not

Program:-

```
import java.util.Scanner;

class perfectNo

{

	public static void main(String argv[])

	{

		Scanner in = new Scanner(System.in);

		int intNumber=0,n=0,s=0,j;

		System.out.print("Enter Number: ");

		intNumber=in.nextInt();

		n=intNumber;

		for(int i=1;i<=n/2;i++)

		{

			if(n % i == 0)

				s=s+i;

		}

		if(s == intNumber)

			System.out.println(intNumber+" is a Perfect Number");

		else

			System.out.println(intNumber+" is Not a Perfect Number");

	}

}
```

Output:-

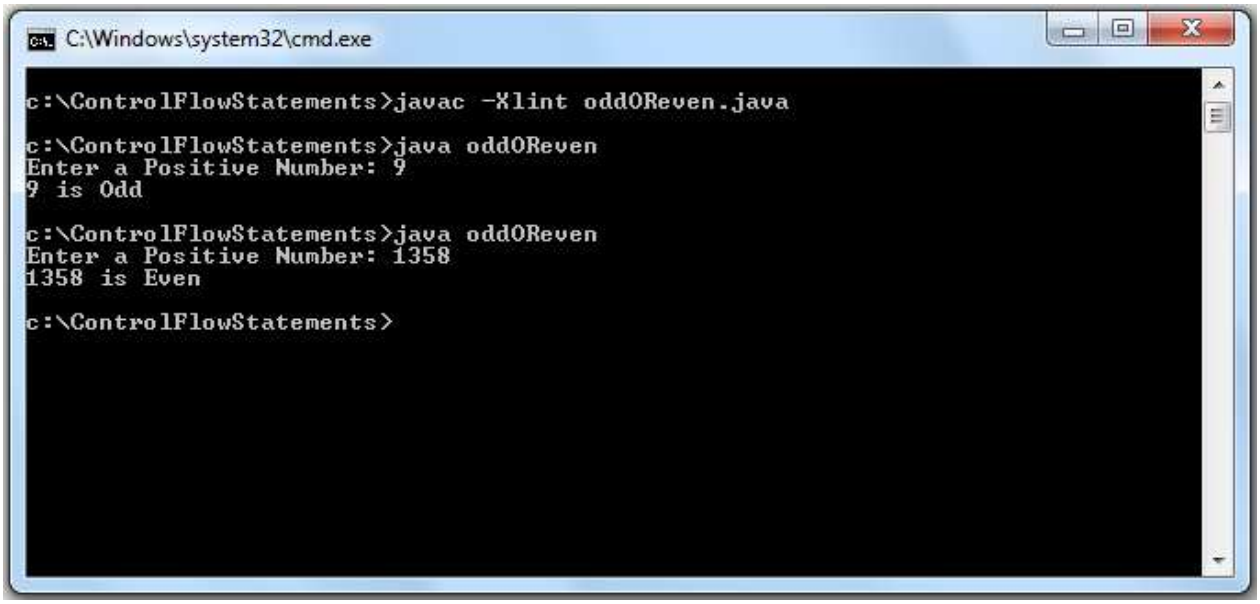

C:\Windows\system32\cmd.exe
c:\ControlFlowStatements>javac -Xlint perfectNo.java
c:\ControlFlowStatements>java perfectNo
Enter Number: 496
496 is a Perfect Number
c:\ControlFlowStatements>java perfectNo
Enter Number: 28
28 is a Perfect Number
c:\ControlFlowStatements>java perfectNo
Enter Number: 169
169 is Not a Perfect Number
c:\ControlFlowStatements>

27) Write a program to check whether a number is even or odd.Put proper restrictions on the values given by the user

Program:-

```
import java.util.Scanner;

class oddOReven

{

	public static void main(String argv[])

	{

		Scanner in = new Scanner(System.in);

		int intNumber=0,f=1;

		do

		{

			if(f == 0)

				System.out.println("Wrong Entry:-ReEnter ");

			System.out.print("Enter a Positive Number: ");

			intNumber=in.nextInt();

			f=0;

		}while(intNumber <= 0);

		if(intNumber % 2 == 0)

			System.out.println(intNumber+" is Even");

		else

			System.out.println(intNumber+" is Odd");

	}

}
```

Output:-


C:\Windows\system32\cmd.exe
c:\ControlFlowStatements>javac -Xlint oddOReven.java
c:\ControlFlowStatements>java oddOReven
Enter a Positive Number: 9
9 is Odd
c:\ControlFlowStatements>java oddOReven
Enter a Positive Number: 1358
1358 is Even
c:\ControlFlowStatements>

28) Write a program that will display modulo value (|x|) of a number taken from the user

Program:-

```
import java.util.Scanner;

class modulo

{

        public static void main(String argv[])

        {

                Scanner in = new Scanner(System.in);

                int intNumber=0;

                System.out.print("Enter a Number: ");

                intNumber=in.nextInt();

                System.out.print("| "+intNumber+" | = ");

                if(intNumber < 0)

                        intNumber*=(-1);

                System.out.println(intNumber);

        }

}
```

Output:-

29) Write a menu driven program that will perform arithmetic operation on two numbers

Program:-

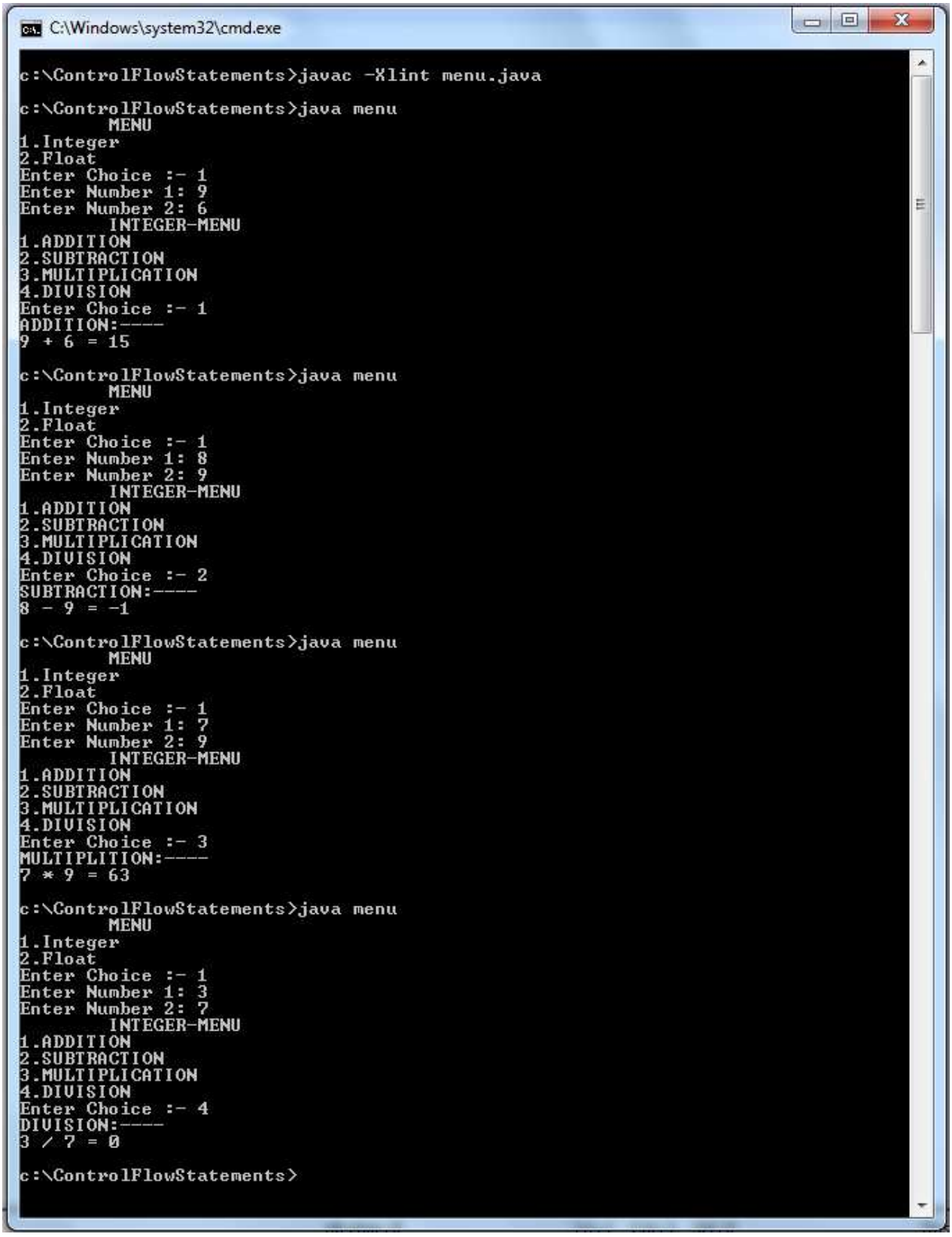
```
import java.util.Scanner;
class menu
{
	public static void main(String argv[])
	{
		Scanner in = new Scanner(System.in);
		int resulti=0,intNumber1=0,intNumber2=0,c=0,cc=0;
		float resultf=0,floatNumber1=0.0f,floatNumber2=0.0f;
		System.out.println("\tMENU");
		System.out.println("1.Integer");
		System.out.println("2.Float");
		System.out.print("Enter Choice :- ");
		c=in.nextInt();;
		switch(c)
		{
			case 1:
				System.out.print("Enter Number 1: ");
				intNumber1=in.nextInt();
				System.out.print("Enter Number 2: ");
				intNumber2=in.nextInt();
				System.out.println("\tINTEGER-MENU");
				System.out.println("1.ADDITION");
				System.out.println("2.SUBTRACTION");
				System.out.println("3.MULTIPLICATION");
				System.out.println("4.DIVISION");
				System.out.print("Enter Choice :- ");
				cc=in.nextInt();
				switch(cc)
```

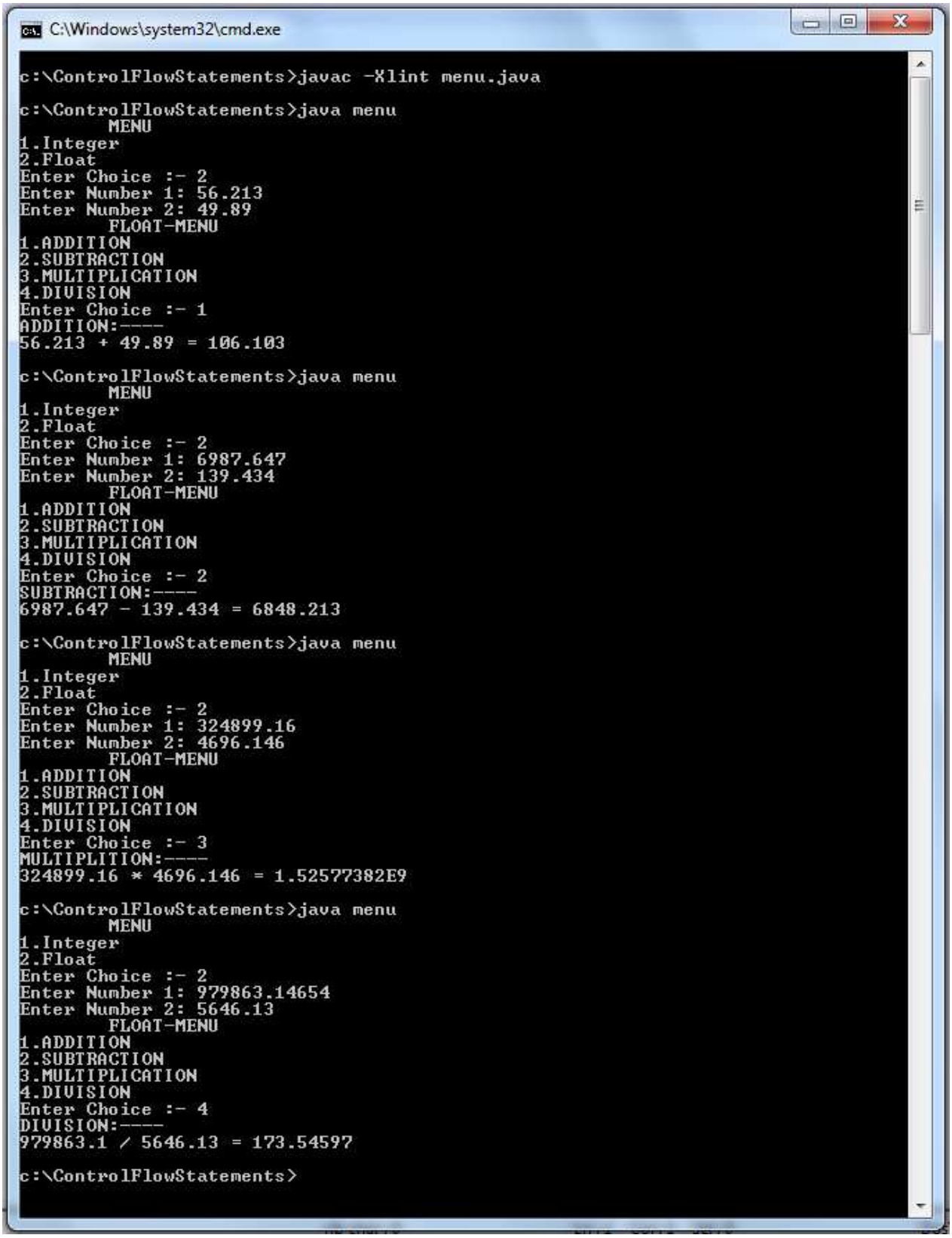
```
{
        case 1:
            resulti=intNumber1+intNumber2;
            System.out.println("ADDITION:----
            \n"+intNumber1+" + "+intNumber2+" =
            "+resulti);
            break;
        case 2:
            resulti=intNumber1-intNumber2;
            System.out.println("SUBTRACTION:----
            \n"+intNumber1+" - "+intNumber2+" =
            "+resulti);
            break;
        case 3:
            resulti=intNumber1*intNumber2;
            System.out.println("MULTIPLITION:----
            \n"+intNumber1+" * "+intNumber2+" =
            "+resulti);
            break;
        case 4:
            resulti=intNumber1/intNumber2;
            System.out.println("DIVISION:----
            \n"+intNumber1+" / "+intNumber2+" =
            "+resulti);
            break;
        default:
            System.out.println("Wrong Input Int");
            break;
    }
    break;
case 2:
    System.out.print("Enter Number 1: ");
    floatNumber1=in.nextFloat();
```

```
System.out.print("Enter Number 2: ");
floatNumber2=in.nextFloat();
System.out.println("\tFLOAT-MENU");
System.out.println("1.ADDITION");
System.out.println("2.SUBTRACTION");
System.out.println("3.MULTIPLICATION");
System.out.println("4.DIVISION");
System.out.print("Enter Choice :- ");
cc=in.nextInt();
switch(cc)
{
        case 1:
                resultf=floatNumber1+floatNumber2;
                System.out.println("ADDITION:----
                \n"+floatNumber1+" + "+floatNumber2+" =
                "+resultf);
                break;
        case 2:
                resultf=floatNumber1-floatNumber2;
                System.out.println("SUBTRACTION:----
                \n"+floatNumber1+" - "+floatNumber2+" =
                "+resultf);
                break;
        case 3:
                resultf=floatNumber1*floatNumber2;
                System.out.println("MULTIPLITION:----
                \n"+floatNumber1+" * "+floatNumber2+" =
                "+resultf);
                break;
        case 4:
                resultf=floatNumber1/floatNumber2;
```

```
                                        System.out.println("DIVISION:----
                                        \n"+floatNumber1+" / "+floatNumber2+" =
                                        "+resultf);

                                        break;

                                default:

                                        System.out.println("Wrong Input Float");

                                        break;

                                }

                                break;

                        default:

                                System.out.println("Wrong Input");

                                break;

                }

        }

}
```

Output:-


C:\Windows\system32\cmd.exe
c:\ControlFlowStatements>javac -Xlint menu.java
c:\ControlFlowStatements>java menu
MENU
1.Integer
2.Float
Enter Choice :- 1
Enter Number 1: 9
Enter Number 2: 6
INTEGER-MENU
1.ADDITION
2.SUBTRACTION
3.MULTIPLICATION
4.DIVISION
Enter Choice :- 1
ADDITION:----
9 + 6 = 15
c:\ControlFlowStatements>java menu
MENU
1.Integer
2.Float
Enter Choice :- 1
Enter Number 1: 8
Enter Number 2: 9
INTEGER-MENU
1.ADDITION
2.SUBTRACTION
3.MULTIPLICATION
4.DIVISION
Enter Choice :- 2
SUBTRACTION:----
8 - 9 = -1
c:\ControlFlowStatements>java menu
MENU
1.Integer
2.Float
Enter Choice :- 1
Enter Number 1: 7
Enter Number 2: 9
INTEGER-MENU
1.ADDITION
2.SUBTRACTION
3.MULTIPLICATION
4.DIVISION
Enter Choice :- 3
MULTIPLITION:----
7 * 9 = 63
c:\ControlFlowStatements>java menu
MENU
1.Integer
2.Float
Enter Choice :- 1
Enter Number 1: 3
Enter Number 2: 7
INTEGER-MENU
1.ADDITION
2.SUBTRACTION
3.MULTIPLICATION
4.DIVISION
Enter Choice :- 4
DIVISION:----
3 / 7 = 0
c:\ControlFlowStatements>


C:\Windows\system32\cmd.exe
c:\ControlFlowStatements>javac -Xlint menu.java
c:\ControlFlowStatements>java menu
MENU
1.Integer
2.Float
Enter Choice :- 2
Enter Number 1: 56.213
Enter Number 2: 49.89
FLOAT-MENU
1.ADDITION
2.SUBTRACTION
3.MULTIPLICATION
4.DIVISION
Enter Choice :- 1
ADDITION:----
56.213 + 49.89 = 106.103
c:\ControlFlowStatements>java menu
MENU
1.Integer
2.Float
Enter Choice :- 2
Enter Number 1: 6987.647
Enter Number 2: 139.434
FLOAT-MENU
1.ADDITION
2.SUBTRACTION
3.MULTIPLICATION
4.DIVISION
Enter Choice :- 2
SUBTRACTION:----
6987.647 - 139.434 = 6848.213
c:\ControlFlowStatements>java menu
MENU
1.Integer
2.Float
Enter Choice :- 2
Enter Number 1: 324899.16
Enter Number 2: 4696.146
FLOAT-MENU
1.ADDITION
2.SUBTRACTION
3.MULTIPLICATION
4.DIVISION
Enter Choice :- 3
MULTIPLITION:----
324899.16 * 4696.146 = 1.52577382E9
c:\ControlFlowStatements>java menu
MENU
1.Integer
2.Float
Enter Choice :- 2
Enter Number 1: 979863.14654
Enter Number 2: 5646.13
FLOAT-MENU
1.ADDITION
2.SUBTRACTION
3.MULTIPLICATION
4.DIVISION
Enter Choice :- 4
DIVISION:----
979863.1 / 5646.13 = 173.54597
c:\ControlFlowStatements>