1. Write your own program using arithmetic operators.

```
import java.util.Scanner;
public class Arithmatic {
    public static void main(String[] args) {
         Scanner c = new Scanner(System.in);
         System. out. println("Enter the two numbers");
         int num = c.nextInt();
         int num0 = c.nextInt();
         System.out.println("Addition:"+(num + num0));
         System.out.println("Subraction:"+(num-num0));
         System.out.println("Multiply:"+(num * num0));
         System.out.println("Modulo:"+(num % num0));
         System.out.println("Division:"+(num / num0));
    }
}
Output
Enter the two numbers
34
9
Addition:43
Subraction:25
Multiply:306
Modulo:7
Division:3
2.
    Write your own program using arithmetic assignment operators.
import java.util.Scanner;
public class Arith as {
    public static void main(String[] args) {
    int a=10,b=20;
         System. out. println (a=b); //10=20//20
         System. out. println (a+=b); //10=10+20=40
         System. out. println (a-=b); //10=10-20=20
         System. out. println (a*=b); //10=10*20=400
         System. out. println (a/=b); //10=10/20
         System.out.println(a%=b);//0
         }
         }
```

```
Output
20
40
20
400
20
\cap
3.
    Write your own program using relational operators.
import java.util.Scanner;
public class Relation {
    public static void main(String[] args) {
         Scanner dd = new Scanner(System.in);
         System.out.println("Enter A value: ");
         int a = dd.nextInt();
         System.out.println("Enter B value");
         int b = dd.nextInt();
         System.out.println("A is Greater then b:
"+(a>b));
         System.out.println("A is Lesser then b:
"+(a<b));
         System.out.println("A is Greater then equal
to b: "+(a > = b));
         System.out.println("A is Lesser then equal to
b: "+(a<=b));
         System.out.println("A is Equal to b:
"+(a==b));
         System.out.println("A is Not equal to b:
"+(a!=b));
    }
}
Output
Enter A value:
Enter B value
A is Greater then b: false
A is Lesser then b: true
A is Greater then equal to b: false
A is Lesser then equal to b: true
```

```
A is Equal to b: false
A is Not equal to b: true
4.
    Write your own program using logical operators.
import java.util.Scanner;
public class Logical {
    public static void main(String[] args) {
         boolean bool1 = true, bool2 = false;
         System.out.println("bool1 && bool2 = " +
(bool1 && bool2));
         System.out.println("bool1 || bool2 = " +
(bool1 | bool2));
         System.out.println("!(bool1 && bool2) = " +
! (bool1 && bool2));
}
Output:
bool1 && bool2 = false
bool1 || bool2 = true
!(bool1 \&\& bool2) = true
    Write your own program to show the use of assignment operator.
import java.util.Scanner;
public class Assign Opp {
    public static void main(String[] args) {
         int modulo = 0, add = 0, mul = 0, sub = 0;
         float div = 0;
         Scanner scan = new Scanner(System.in);
         System.out.println("enter five number: ");
         int num1 = scan.nextInt();
         int num2 = scan.nextInt();
         int num3 = scan.nextInt();
         int num4 = scan.nextInt();
```

int num5 = scan.nextInt();

```
add = num1 += 5; // 4+5
         sub = num2 -= 5; // 3-5
         mul = num3 *= 5; // 5*5
         div = num4 /= 5; // 6/5
         modulo = num5 %= 5; // 7%5
         System.out.println(" addition + " + add);
         System.out.println(" subtraction - " + sub);
         System.out.println(" multiplication * " +
mul);
         System.out.println(" division / " + div);
         System.out.println(" modulo % " + modulo);
    }
}
Output
enter five number :
3
5
6
 addition + 9
 subtraction - -2
 multiplication * 25
 division / 1.0
 modulo % 2
    Write a program to check age of student is greater than 18.
6.
import java.util.Scanner;
public class AgeMon {
    public static void main(String[] args) {
         Scanner e = new Scanner(System.in);
         System.out.println("Enter the Age");
         int Age = e.nextInt();
         if (Age>=18)
             System.out.println("You are eligable");
         }else {
             System.out.println("Sorry! you under
'18'");
         }
```

```
}
Output
Enter the Age
17
Sorry! you under '18'
7.
    Write a program to check number is even or odd.
public static void main(String[] args) {
         Scanner e = new Scanner(System.in);
         System.out.println("Enter the Number");
         int num = e.nextInt();
         if (num % 2 == 0) {
              System.out.println("Even number");
         } else {
              System.out.println("Not a even number");
         }
    }
Output
Enter the Number
Not a even number
8.
    Write a program to check whether number is greater than 100 and 200.
import java.util.Scanner;
public class AgeMon {
    public static void main(String[] args) {
         Scanner e = new Scanner(System.in);
         System.out.println("Enter the Number");
         int num = e.nextInt();
         if (num >= 100 && num <= 200) {
              System.out.println("the number is
between the 100 to 200 ");
         } else {
              System.out.println("Invalid");
         }
```

```
}
}
Output
Enter the Number
the number is between the 100 to 200
    Write a program to check whether both numbers are same or not.
import java.util.Scanner;
public class Neither {
    public static void main(String[] args) {
         Scanner type = new Scanner(System.in);
         System.out.println("Enter the value");
         int i = type.nextInt();
         System.out.println("Enter the value");
         int j = type.nextInt();
         if(i==j) {
              System.out.println("Both are same");
              System.out.println("Both are
different");
    }
}
Output
Enter the value
Enter the value
5.5
Both are same
```