1)

```java
package arithmatic;

public class Arthmatic {

    public int add(int a, int b) {

        int c = a+b;

        return c;

    }

    public int sub(int a, int b) {

        int c = a-b;

        return c;

    }

    public int mul(int a, int b) {

        int c = a*b;

        return c;

    }

    public int div(int a, int b) {

        int c = a/b;

        return c;

    }

    public int mod(int a, int b) {

        int c = a%b;

        return c;

    }

    public static void main(String[] args) {

        // TODO Auto-generated method stub

        Arthmatic a1=new Arthmatic();

        System.out.println(a1.add(12,10));

        System.out.println(a1.sub(20,10));
```

```java
        System.out.println(a1.mul(10,10));

        System.out.println(a1.div(12,3));

        System.out.println(a1.mod(99,10));

    }


}
```

output:

22

10

100

4

9

**2)

```java
package asignmentop;


public class Assignment {


    public static void main(String[] args) {

        // TODO Auto-generated method stub

        int a=13;

        a+=10;

        int b=45;

        b-=20;

        float c=24f;

        c*=2;

        float d=25f;

        d/=5;
```

```java
        float e=26f;

        e%=5;

        System.out.println(a);

        System.out.println(b);

        System.out.println(c);

        System.out.println(d);

        System.out.println(e);
    }


}
```

output:

23

25

48.0

5.0

1.0

****

3)

```java
package realationalop;


public class Relational {


    public static void main(String[] args) {
        // TODO Auto-generated method stub
     int a=12;

     int b=76;

     System.out.println(a>b);
```

```java
        System.out.println(a<b);

        System.out.println(a>=b);

        System.out.println(a<=b);

        System.out.println(a!=b);

    }


}
```

output:

false

true

false

true

true

****

4)

```java
package logicalop;

public class Logical {


    public static void main(String[] args) {

        // TODO Auto-generated method stub

        int a=34;

        int b=68;

        System.out.println(a>b&a<=b);

        System.out.println(a>b|a<=b);

        System.out.println(!(a>=b));

    }

}
```

output:

false

true

true

****

5)

```java
package assignmentop1;


public class Asignment {


    public static void main(String[] args) {

        // TODO Auto-generated method stub

        int a=45,b=24;

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

        System.out.println(a==b);

    }


}
```

output:

value of a is= 45

false

****

6)

```java
package agechecking;
public class Age {


    public static void main(String[] args) {
```

```java
        // TODO Auto-generated method stub

        int age=19;

        System.out.println(age>18);

    }


}
```

output:

```
true
```

****

7)

```java
package evenorodd;


public class Testing {


    public static void main(String[] args) {

        // TODO Auto-generated method stub

        int a=16;

        boolean      b;

        b=(a%2==0);

        System.out.println("number is even= "+b);

        b=(a%2==1);

        System.out.println("number is odd= "+b);

    }

}
```

output:

```
number is even= true

number is odd= false
```

```
************************************************************************
8)

package greater;

public class Greater {

        public static void main(String[] args) {

                // TODO Auto-generated method stub

                int a=150;

                boolean  b=a>100;

                System.out.println("A is greater than 100: "+b);

                boolean c=a<100;

                System.out.println("A is smaller than 100: "+c);

                boolean d=a>200;

                System.out.println("A is greater than 200: "+d);

                boolean e=a<200;

                System.out.println("A is smaller than 200: "+e);

}
}
```

output:

A is greater than 100: true

A is smaller than 100: false

A is greater than 200: false

A is smaller than 200: true

```
************************************************************************
9)

package checkingnumberissameornot;

public class Check {
```

```java
    public static void main(String[] args) {

        // TODO Auto-generated method stub

        int a=80,b=90;

        boolean c=(a==b);

        System.out.println("number is same: "+c);

        boolean d=!(a==b);

        System.out.println("number is not same: "+d);

    }


}
```

output:

number is same: false

number is not same: true

****