

OPERATORS

1. Assignment Operator

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

        // ASSIGNMENT OPERATORS

        int A = 10;
        A += 10; // A=A+10
        System.out.println(A);

        int B = 10;
        B -= 5; // B=B-5
        System.out.println(B);

        int C = 10;
        C = 8; // C=5
        System.out.println(C);

        int D = 10;
        D *= 5; // D=D*5
        System.out.println(D);

        int E = 10;
        E /= 5; // E=E/5
        System.out.println(E);
    }
}
```

2. Binary Operator

```
import java.util.Scanner;

public class Binary {
    public static void main (String args[]) {
        Scanner sc = new Scanner (System.in);

        //Binary Operators
        //Binary is a type of Arithmetic Operators
        int a = sc.nextInt();
        int b = sc.nextInt();
        int add = a + b;
        System.out.println("Sum = " +add);
        int sub = a - b;
        System.out.println("Subtraction = " +sub);
        int mul = a * b;
        System.out.println("Multiplication = " +mul);
        int div = a / b;
        System.out.println("Division = " +div);
        int mod = a % b;
        System.out.println("Modulo = " +mod);
    }
}
```

3. Logical Operator

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

        // LOGICAL OPERATORS

        // 1. Logical AND
        System.out.println("Logical AND");
        System.out.println((5>2) && (10>9));
        System.out.println((7>10) && (10>5));

        // 2. Logical OR
        System.out.println("Logical OR");
        System.out.println((7>10) || (10>9));
        System.out.println((2>100) || (10<5));

        // 3. Logical NOT
        System.out.println("Logical NOT");
        System.out.println(!(10>5));
        System.out.println(!(10<5));

    }
}
```

4. Relational Operator

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

        // RELATIONAL OPERATORS
        // It gives output in true or false.
        System.out.println("Equal to Operator");
        int a = 10;
        int b = 10;
        System.out.println(a==b);
        System.out.println("Not Equal to Operator");
        int c = 5;
        int d = 9;
        System.out.println(c!=d);
        System.out.println("Greater than Operator");
        int e = 5;
        int f = 9;
        System.out.println(e>f);
        System.out.println("Smaller than Operator");
        int g = 5;
        int h = 9;
        System.out.println(g<h);
        System.out.println("Greater than equal to Operator");
        int i = 5;
        int j = 9;
        System.out.println(i>=j);
        System.out.println("Smaller than equal to Operator");
        int k = 5;
        int l = 9;
        System.out.println(k<=l);

    }
}
```

5. Unary Operator

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

        // INCREMENT OPERATORS
        System.out.println("PreIncrement");
        int a = 10;
        int b = ++a;
        System.out.println(a);
        System.out.println(b);
        System.out.println("PostIncrement");
        int c = 10;
        int d = c++;
        System.out.println(c);
        System.out.println(d);

        //DECREMENT OPERATORS
        System.out.println("PreDecrement");
        int e = 10;
        int f = --e;
        System.out.println(e);
        System.out.println(f);
        System.out.println("PostDecrement");
        int g = 10;
        int h = g--;
        System.out.println(g);
        System.out.println(h);
    }
}
```

6. Question-1

```
public class Que1 {
    public static void main(String[] args) {
        int x = 2, y = 5;
        int exp1 = (x * y / x);
        int exp2 = (x * (y / x));
        System.out.println(exp1);
        System.out.println(exp2);
    }
}
```

7. Question-2

```
public class Que2 {
    public static void main(String[] args) {
        int x = 200, y = 50, z = 100;
        if(x > y && y > z) {
            System.out.println("Hello");
        }
        if(z > y && z < x) {
            System.out.println("Java");
        }
        if((y + 200) < x && (y + 150) < z) {
            System.out.println("Hello Java");
        }
    }
}
```

8. Question-3

```
public class Que3 {  
    public static void main(String[] args) {  
        int x, y, z;  
        x = y = z = 2;  
        x += y;  
        y -= z;  
        z /= (x + y);  
        System.out.println(x + " " + y + " " + z);  
    }  
}
```

9. Question-4

```
public class Que4 {  
    public static void main(String[] args) {  
        int x = 9, y = 12;  
        int a = 2, b = 4, c = 6;  
        int exp = 4/3 * (x + 34) + 9 * (a + b * c) + (3 + y * (2 + a)) / (a + b * y);  
        System.out.println(exp);  
    }  
}
```

10. Question-5

```
public class Que5 {  
    public static void main(String[] args) {  
        int x = 10, y = 5;  
        int exp1 = (y * (x / y + x / y));  
        int exp2 = (y * x / y + y * x / y);  
        System.out.println(exp1);  
        System.out.println(exp2);  
    }  
}
```