DAY-10

22 June 2023 16:10

- ARITHMETIC OPERATOR
- RELATIONAL OPERATOR
- LOGICAL OPERATOR
- BITWISE OPERATOR
- SHIFT OPERATOR
- TERNARY OPERATOR
- UNARY OPERATOR

10+2 = 12

TERNARY OPERATOR

- CONDITIONAL OPERATOR IS CALLES AS TERNARY OPERATOR
- THIS OPERATOR CONSISTS THREE OPERANDS AND IS USED TO EAVALUATE BOOLEAN EXPRESSION
- THE GOAL OF THE OPERATOR IS TO DECIDE WHICH VALUE SHOULD BE ASSIGNED TO THE VARIABLE

SYNTAX :

VARIABLE = (EXPRESSION) ? VALUE IF TRUE : VALUE IF FALSE;

EXAMPLE :

```
class Test1
{
	public static void main(String[] args)
	{
		int a = 2, b = 1;

		int c = (a>b) ? (a) : (b);

		System.out.println(c);
	}
}
```

UNARY OPERATOR

- THIS OPERATOR PERFORM OPERATION ONLY ONE OPERAND
- TYPES OF UNARY OPERATORS ARE
    - INCREMENTAL OPERATOR
        - PRE-INCREMENTAL OPERATOR
        - POST INCREMENTAL OPERATOR
    - DECREMENTAL OPERATOR
        - PRE-DECREMENTAL OPERATOR
        - POST DECREMENTAL OPERATOR

PRE - INCREMENTAL OPERATOR

- SYNTAX :

```
VARIABLE1 = ++VARIABLE2;
```

- HERE FIRST THE VALUE OF VARIABLE2 WILL INCREMENTED BY 1, THEN THE INCREMENTED VARIABLE2 VALUE WILL BE ASSIGNED TO VARIABLE1

```
class Test1
{
	public static void main(String[] args)
	{
		int x = 10;

		int y = ++x;



		System.out.println("The value of x is : "+x);
		System.out.println("The value of y is : "+y);
	}
}
```

POST- INCREMENT OPERATOR

- SYNTAX :

```
	VARIABLE1 = VARIABLE2 ++;
```

- HERE FIRST THE VALUE OF VARIABLE2 WILL BE ASSIGNED TO VARIABLE1 AND THEN VARIABLE2 IS INCREMENTED BY 1

```
class Test1
{
	public static void main(String[] args)
	{
		int x = 10;

		int y = x++;



		System.out.println("The value of x is : "+x);
		System.out.println("The value of y is : "+y);
	}
}
```

PRE - DECREMENTAL OPERATOR

- SYNTAX :

```
VARIABLE1 = --VARIABLE2;
```

- HERE FIRST THE VALUE OF VARIABLE2 WILL DECREMENTED BY 1, THEN THE DECREMENTED VARIABLE2 VALUE WILL BE ASSIGNED TO VARIABLE1

```
class Test1
{
	public static void main(String[] args)
	{
		int x = 10;

		int y = --x;



		System.out.println("The value of x is : "+x);
		System.out.println("The value of y is : "+y);
	}
}
```

POST- DECREMENT OPERATOR

- SYNTAX :

```
VARIABLE1 = VARIABLE2 --;
```

- HERE FIRST THE VALUE OF VARIABLE2 WILL BE ASSIGNED TO VARIABLE1 AND THEN VARIABLE2 IS DECREMENTED BY 1

```
class Test1
{
	public static void main(String[] args)
	{
		int x = 10;

		int y = x--;



		System.out.println("The value of x is : "+x);
```

```
            System.out.println("The value of y is : "+y);
        }
}
```

EXPRESSION	INTIAL VALUE OF X	FINAL VALUE OF Y	FINAL VALUE OF X
Y = ++X	10	11	11
Y = X ++	10	10	11
Y = X--	10	10	9
Y = --X	10	9	9

QUESTIONS

int x = 10 , y = ?

EXPRESSION	INTIAL VALUE OF X	FINAL VALUE OF X	FINAL VALUE OF Y
Y = (x++) + (x++)	10		
Y = (X++) +(X++) + (X++)	10		
Y = (++X) + (++X) + (++X)	10		
Y = (++X) + (X++) + (++X) + (++X)	10		
Y = (++X)+(++X)+(X++)+(X++)+(X++)+(++X)+(++X)	10		
Y = (X++) + (X--) +(--X)+(--X)	10		
Y = (--X)-(X--)+(X--) -(X++)+(++X)+(X++)+(++X)	10		
Y = (X--) - (--X) +(--X)+(++X) +(X++)	5		
Y = (--X)-(X--)+(X--)-(X++)+(++X)+(X++)+(++x)	12		