

→ Unary operator

int a = 5;

a++ :- <u>post</u> inc.	:- will increment value later
++a :- <u>pre</u> inc.	:- will increment value first

note:-

a = 5

print (a++)

⇒ print(a);
a++;

print (++a)

⇒ a++;
print(a);

Note :-

int b = 6;

1) b = b + 2;

also, b += 2;

2) int c = 7;

c = c - 3;

also, c -= 3;

Ques Print final value of a, b, c.

$\text{int } a = 5;$	$a = 5$	b	c
1) $b = a++$	6	5	—
2) $c = b++$	6	6	5
3) $a = ++b$	7	7	5
4) $b = ++c$	7	6	6
5) $c = ++a$	8	6	8
6) $a = b++$	6	7	8
7) $b = ++c$	6	9	9
8) $c = a++$	7	9	6

$a = 7, b = 9, c = 6$

Ques Print a, b and c

a = a + b
b = b - c

a = 5	a	b	c
b = ++a	6	6	-
c = ++b	6	7	7
a = b++	7	8	7
b = c++	7	7	8
c = ++a	8	7	8
a += b	15	7	8
b -= c	15	-1	8
c += b	15	-1	7
b --	15	-1	7
a ++	15	-2	7
c --	16	-2	7

a = 16, b = -2, c = 6

⇒ Conditions

1) if condition

syntax

```
if ( condition ) {  
    //statement  
}
```

ex:-

```
if ( 5 > 3 ) {  
    System.out.println("Hi");  
}
```

Ques print the no. if it is greater than 100

```
int n = scn.nextInt(); // 110  
if ( n > 100 ) {  
    System.out.println(n);  
}
```

o/p

```
┌  
│ 110  
└
```

2)

```
if ( condition ) {  
    // statement 1  
}  
else {  
    // statement 2  
}
```

ex:-

```
if ( 5 > 7 ) {  
    Syso ( "Hi" );  
}  
else {  
    Syso ( "Bye" );  
}
```

Ques print a given no. if it is +ve, otherwise double it and print

`int x = 7;` \longrightarrow 7

```
if ( x >= 0 ) {  
    Syso ( x );  
}  
else {  
    Syso ( 2 * x );  
}
```

$x = -3$
 $ans = -6$

Adult or not 1

```
public static void main(String[] args) {  
    Scanner scn = new Scanner(System.in);  
    int age = scn.nextInt();  
  
    if ( age >= 18 ) {  
        System.out.println("Adult");  
    } else {  
        System.out.println("Below age");  
    }  
}
```

Note :-

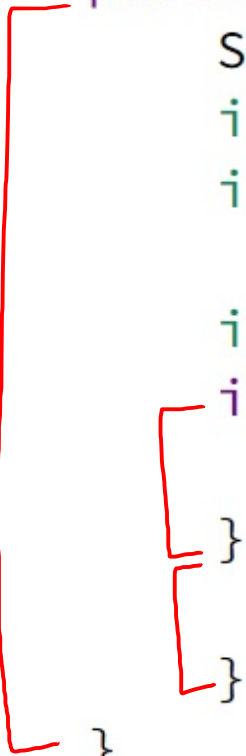
1) it always checks from top to bottom

Shop Discount


```
public static void main(String[] args) {  
    Scanner scn = new Scanner(System.in);  
    int units = scn.nextInt();  
  
    int price = units * 100;  
    if ( price > 1000 ) {  
        int discount = price / 10;  
        price -= discount;  
    }  
    System.out.println(price);  
}
```

High Sum or Low Sum

```
public static void main(String[] args) {  
    Scanner scn = new Scanner(System.in);  
    int x = scn.nextInt();  
    int y = scn.nextInt();  
  
    int sum = x + y;  
    if ( sum >= 100 ) {  
        System.out.println("High Sum");  
    } else {  
        System.out.println("Low Sum");  
    }  
}
```

A red bracket on the left side of the code block groups the entire main method. A second red bracket on the right side groups the if-else conditional logic.

Print Bonus



```
public static void main(String[] args) {  
    Scanner scn = new Scanner(System.in);  
    int salary = scn.nextInt();  
    int years = scn.nextInt();  
  
    if ( years > 5 ) {  
        int bonus = (salary * 5) / 100;  
        System.out.println(bonus);  
    } else {  
        System.out.println(0);  
    }  
}
```