



Methods in Java

What and Why?

baar baar karna hai kuch → Loops

Built-In Methods

`Math.floor(x)`



`qif`

$\overbrace{\quad\quad\quad}^4 13.7$

`[x]`

`or`

`└x┘`

$\overbrace{\quad\quad\quad}^3$

$\overbrace{\quad\quad\quad}^2$

$\overbrace{0.1.2}^1$

$\overbrace{\quad\quad\quad}^0$

$\overbrace{\quad\quad\quad}^3$
 $\overbrace{\quad\quad\quad}^2$
 $\overbrace{\quad\quad\quad}^1$
 $\overbrace{\quad\quad\quad}^0$
 $\overbrace{\quad\quad\quad}^{-1}$
 $\overbrace{\quad\quad\quad}^{-2}$
 $\overbrace{\quad\quad\quad}^{-3}$
 $\overbrace{0-3.8}^{-4}$

$[-3.8]$

H.W. Find the max of 4 numbers . Input them .

Built-In Methods

a, b, c, d

Syntax and a basic void function

```
public class Syntax {  
    4 public static void harsh(){  
        5 System.out.println("Ashirwad");  
    }  
    1 public static void main(String[] args) {  
        2 System.out.println("Roshan");  
        3 harsh(); ✓  
    }  
}
```

main method runs first

Output

- Roshan
- Ashirwad

Syntax and a basic void function

```
6 public static void shravan(){  
7     karan(); ✓  
8     System.out.println("Khushi");  
9 }  
10  
11 public static void main(String[] args) {  
12     riyanshi();✓  
13 }  
14  
15 public static void karan(){  
16     System.out.println("YASHIKA");  
17 }  
18  
19 public static void riyanshi(){  
20     System.out.println("Ajay");  
21     shravan();✓  
22 }  
23 }
```

Output

- Ajay
- YASHIKA
- Khushi

Understanding method Calls

Method Arguments

return type

```
public static int fun(int a, int b, double c...){
```

}

function ke do kaam hote hai

→ jo unhi andar hai vo chalao
→ ek value bhi nahi sakti hai

return type

```
✓ public static int prasun(int a){  
    ✓ System.out.println("banu");  
    ✓ if(a>0) return 5; // khatam  
    else return 10;  
}  
  
✓ public static void main(String[] args) {  
    ✓ int x = prasun(7); → 5  
    ✓ System.out.println(3+x);  
    //prasun(); // stand alone call lagay  
}
```

7
a

5
x

Output

banu
8

Math.max(a,b) → int

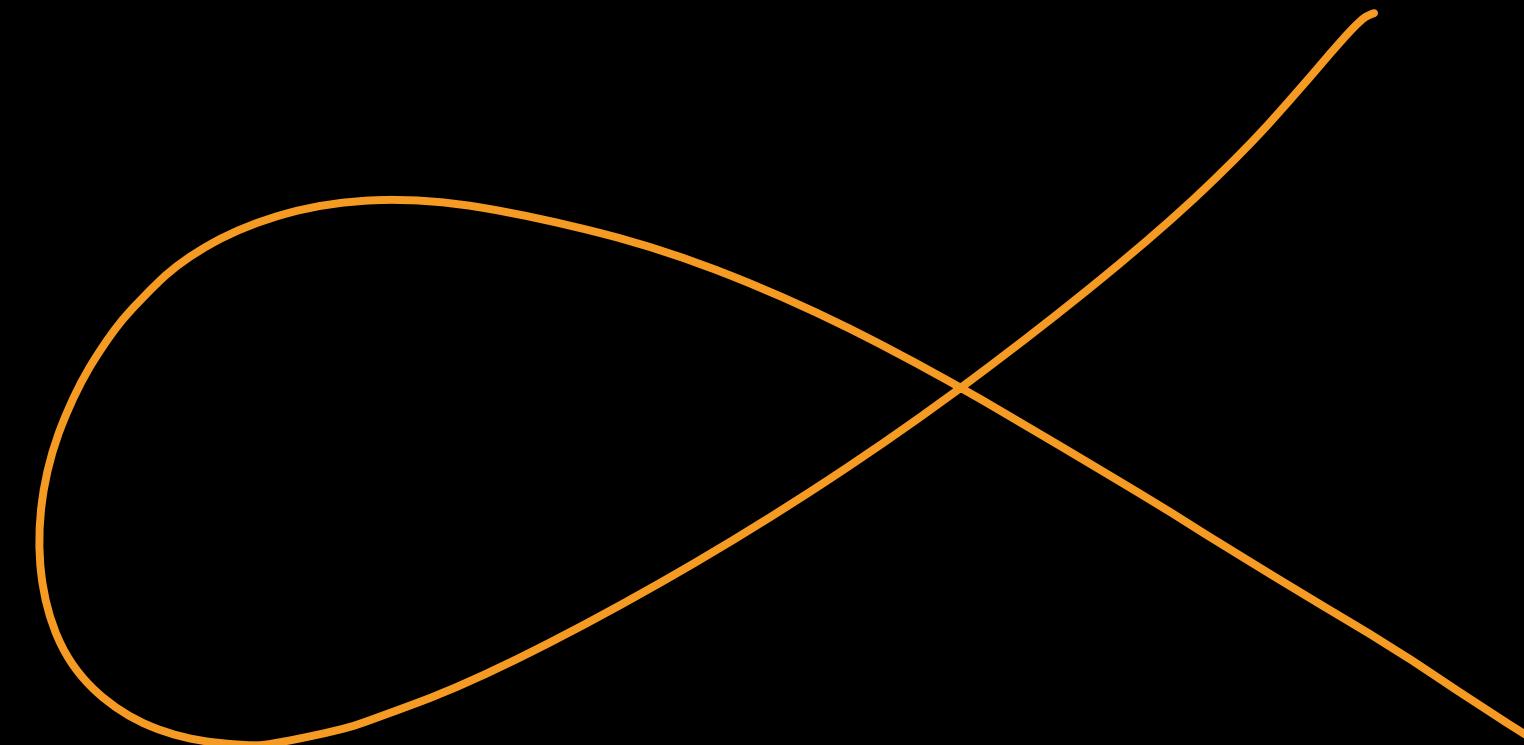
Ques: Take 'n' and 'r' as input and print
 nCr and nPr .

$${}^nC_r = \frac{n!}{r!(n-r)!}$$

For ex: ${}^7C_3 = \frac{7!}{3!(7-3)!} = \frac{7!}{3!4!} = \frac{7 \times 6 \times 5 \times 4 \times 3 \times 2}{3 \times 2 \times 4 \times 3 \times 2} = 35$

$${}^nPr = \frac{n!}{(n-r)!}$$

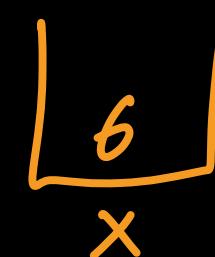
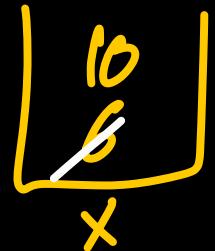
Ques: Take two numbers input and calculate their HCF or GCD.



Recurcian Me Karenge

Pass by Value & Pass by Reference

```
public static void change(int x){  
    x = 10;  
}  
  
public static void main(String[] args) {  
    ✓int x = 6;  
    ✓System.out.println(x);  
    ✓change(6);  
    ✓System.out.println(x);  
}
```



Output

- 6
- 6



Ques: Swap 2 Numbers



THANKYOU
Cuties