

-! Method overloading !-

The word "overloading" in programming means having different versions/implementations of the same entity.

Thus if we have multiple method in a class but every method has same name, then we say that it is "Method overloading".

Example

println();

Case 1

int a = 10;

println(a)

↳ 10 output → int

Case 2 :

String a = "Ayush";

println(a);

↳ Ayush → String

} overloading
for Method.

Points To Remember:-

⊕ When we overload 2 or more method, then these method must differ with each other in term of their arguments and this difference can be 3 type:-

- ① No. of Arguments
- ② Type of arguments
- ③ order of argument.

Class ovd.

```
{  
    Public void Show (int a)  
    {  
        SOP(*a)  
    }  
    Public void Show (char ch)  
    {  
        SOUT(ch)  
    }  
    Public void Show (string s)  
    {  
        SOUT(s)  
    }  
}
```

```
public void show (float c)
```

```
{
```

```
    cout (c)
```

```
}
```

```
}
```

```
Class Useould
```

```
{
```

```
    psum ( )
```

```
{
```

```
ould = new
```

```
ould obj = new ould ( );
```

```
obj. show ('z'); char wala Run hoga
```

```
obj. show (12); Int call  
hoga
```

```
obj. show ("Hello"); String  
call hoga
```

```
obj. show (2.4f); float call hoga
```

```
obj. show (10L); Long है → Int में जा नहीं सकता
```

```
obj. show (true); Boolean है जो float में जाएगा
```

```
}
```

```
}
```

Output

Receive नहीं करेगा

जो वैसे ही generate होगी
Error.

1) Constructor Overloading :-

In a single class we contain many construction.

Method Overloading :- Single class में under same name

In short :- है many function बना but different parameters.

Constructor Overloading :- Single class में under many

In short :- Constructor बना same name, same class name with diff parameters

Class A

```
{
    A()
    {
        Sout ("1st Constructor");
    }
    A(int a)
    {
        Sout (a)
    }
}
```

Class B

```
{
    PSUM ()
    {
        A obj = new A();
        A obj = new A(10);
    }
}
```

default
parameterized