

String : in Java String is pre defined class. combination of more than one character enclosed in double quote. String also known a reference data types.

OOP : Object Oriented Programming

object : object is any real-world entity.

class : blue print of object or template of object.

class is a reference data type which help to create the object.

Car, Employee, Product, Customer, Order, Account etc.

Method syntax in Java

```
returnType methodName(parameterList) {
```

```
}
```

In Java all methods must be inside a class

```
void display() { java
```

```
    set of code.
```

```
}
```

```
function display() { in JavaScript
```

```
}
```

```
function display(): void { in TypeScript
```

```
}
```

display is a type of user defined method no passing parameter and no return type.

```
void add(int a, int b) {
```

 in java

```
}
```

```
function add(a,b) {
```

 in JS

```
}
```

```
function add(a:number,b:number) : void {
```

 in TS

```
}
```

Method name is add and this method take 2 parameter of type int. but no return type.

```
String sayHello(String name) {
```

 in java

```
//coding
```

```
return "Welcome user "+name;
```

```
}
```

```
function sayHello(name) {
```

 in JS

```
return "Welcome user "+name;
```

```
}
```

```
sayHello(name:string):string {
```

 in TS

```
return "Welcome user "+name;
```

```
}
```

Method name is sayHello. Need to pass 1 parameter of type string and return string value.

```
int add(int x, int y) {
```

```
int sum = x+y;
```

```
return sum;
```

```
}
```

Car

```
class Car {  
    int wheel;  
    float price;  
    String colour;  
    void start() {  
  
    }  
    void appliedGear(int gear) {  
  
    }  
    void moving() {  
  
    }  
    void stop() {  
  
    }  
}
```

Package : package is a collection of classes and interface. Package is like a directory or folder.

If we want to call any method or variable part of other class we need to create the object.

className objectRefereceName = `new ClassName();` in Java

let obj = `new ClassName();` in TS or JS

types of variables or field or property or state

in Java variable are divided into 3 types.

1. Instance variable:

- a. The variable which declared inside a class but outside a method including main method also is known as instance variable.
- b. If variable is a type of instance variable which hold default value base upon variable type.
Like int family → 0
float family → 0.0
char → space
String → null
boolean → false
- c. Instance variable we can use inside all method but all those method must be part of same class and method must be non static.

2. Local variable:

- a. The variable which declared inside a method including main method is known as local variable.
- b. Local variable doesn't hold any default value we need to initialize it.
- c. The scope of local variable within that method where it declared.

3. Static variable: