Class Methods

In Java, a method is nothing but a block of code/statement that is declared within the class and can perform different actions when someone calls it. Some methods can be called directly with their name (i.e. without creating the class object) while some methods require an instance/object of the class (i.e. must be invoked with the object of the class).

The methods that can be called directly are referred as a class or static methods, while the methods that need an object of the class to be invoked are referred as instance or non-static methods.

Generally, when we have a class then we have to create an object of that class to access its methods and other members. However, the class/static methods can be accessed inside of the class without creating an instance of that class.

Static vs Public

A static method can be accessed without creating an object of the class while a public method can only be accessed by objects.

Example:

```
public class Main{
    //Static method
    static void staticMethodDemo(){
        System.out.println("A demonstration of static methods");
    }

    public void publicMethodDemo(){
        System.out.println("A demonstration of public methods");
    }

    public static void main(String[] args){
        staticMethodDemo(); // calling the static method
```

```
        Main myObj = new Main();
        myObj.publicMethodDemo(); //calling the public method
.       }

}
```