**Methods**

Behaviour or the action that can be performed by an object or a class.

A method is a set of code which is referred to by name and it can be called at any point in a program simply by utilizing the method name. Method can return a value. It represents the behaviour of the class or object.

**Syntax:**

Access-specifier access-modifier return-type name-of-method(Parameter list){

Method Body

}

**Modifier:** It defines the access type of the method and it is optional to use.

**Non access specifier/modifiers:**

**Return-type:** Method may return a value.

**Name of the method:** This is the method name.

**Parameter list:** The list of parameters, it is the type, order and number of parameters of a method. These are optional, method may contain no parameter.

**Method body:** The method body defines what the method does with statements.

Example

Class ClassMemebersDemo{

Variables

Methods

}

**Note:**

* If method is not returning anything use **void** as return type.
* If the method is not returning anything then you can skip return or use just return.
* To call the method, use method name.
* Write methods in class definition block.
* If return type is mentioned, compulsory it should return the value of type mentioned.
* If return type is mentioned as void and returns something from method, it will give a compile time error.
* A method can return nothing, can return any primitive type or can return any object or can return an array or collection.

(Assignment)

A method can call itself , such methods is **recursion methods**

Example; factorial of a number

**“+” operator also works as concatenation operator which is used to join any two string or variable values.**

**System.out.println (“Hello”+”JAVA”);🡪 HelloJAVA**

**System.out.println (“Hello”+”123”);🡪 Hello123**

**System.out.println (123+456);🡪 579**

**Main method**

**NOTE** : Short cut key for main method :type **main and press ctrl** **and space** button together

**Different ways to define string arguments** **of main method**

**1. public static void main(String []args)**

**2.public static void main(String args[])**

**3.public static void main(String...args)**

**4.public static void main(String[] args)**

**NOTE: parameter args of main method can be named with other name like abc, param, etc**