## **Methods**

- Collection of instructions that performs some specific task.
- · Code readability, maintainability and reusability
- access specifier return type name body
  - Public can be accessed through any class in any package (collection of similar / logical classes)
  - Private can be accessed by methods only within same class
  - Protected can be accessed by other classes in same package or other sub-classes in different package
  - Default id we do not mention anything. Can only be accessed by classes in same package
- return type after computation what your method is returning.
- method name should be verb what action that method is performing

## **Types of Methods**: -

- 1. System Defined
  - Already defined and ready to used in java
- 2. User Defined
  - Programmer created method
- 3. Overloaded Method
  - More than one method with same name is created in same class
  - only arguments are considered, return type cannot be different
- 4. Overridden Method / Dynamic binding
  - Subclass have same method in parent class
  - o if instance of child, first child class is checked for method, if not present then go to parent class
- 5. Static Method
  - Very Important
  - called upon class
  - static methods can not access non-static variables
  - cannot be overridden still we can create same static method in sub-class
  - method which do not modify state of an object, can be declared static.
  - utility methods can also be declared static, which do not use instance variable and compute onl
    on arguments.
- 6. Final Method
  - when we don't want child class to change method (override) of parent class, we can make that method as 'final'
- 7. Abstract Method
  - defined only in abstract class
  - only declaration is done
  - o implementation is done child classes (definition)

## **Variable Argument**

When parameter of function is not fixed

- (...)
- like spread operator of JS