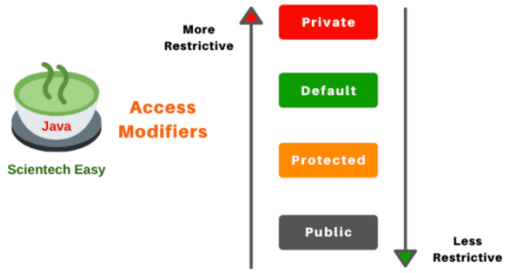
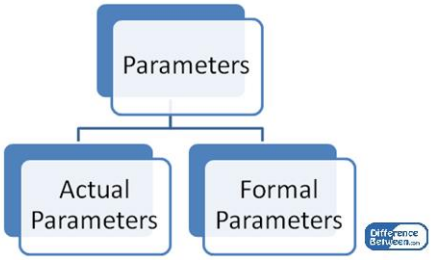
Genesis Grant
RED GROUP(A-C, S-V)

A – C

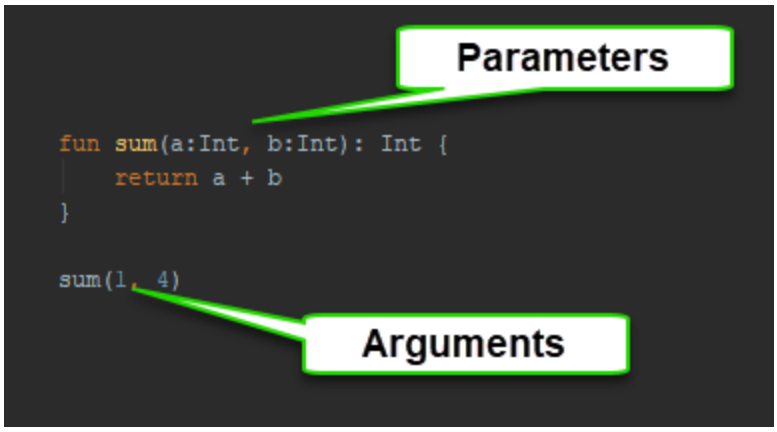
- Access Level: denotes the set of permissions or restrictions provided to a data type
  - Access Levels

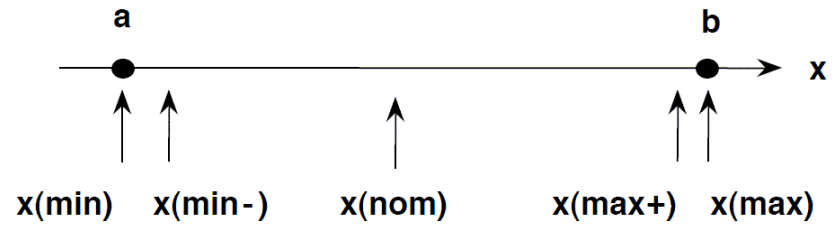
Modifier	Class	Package	Subclass	World
public	Y	Y	Y	Y
protected	Y	Y	Y	N
no modifier	Y	Y	N	N
private	Y	N	N	N

  - Each access level has different qualities and tasks that the user can use and each modifier has a specific level of abilities it can access.
- Access Modifier: keywords in object-oriented languages that set the accessibility of classes, methods, and other members
  - 

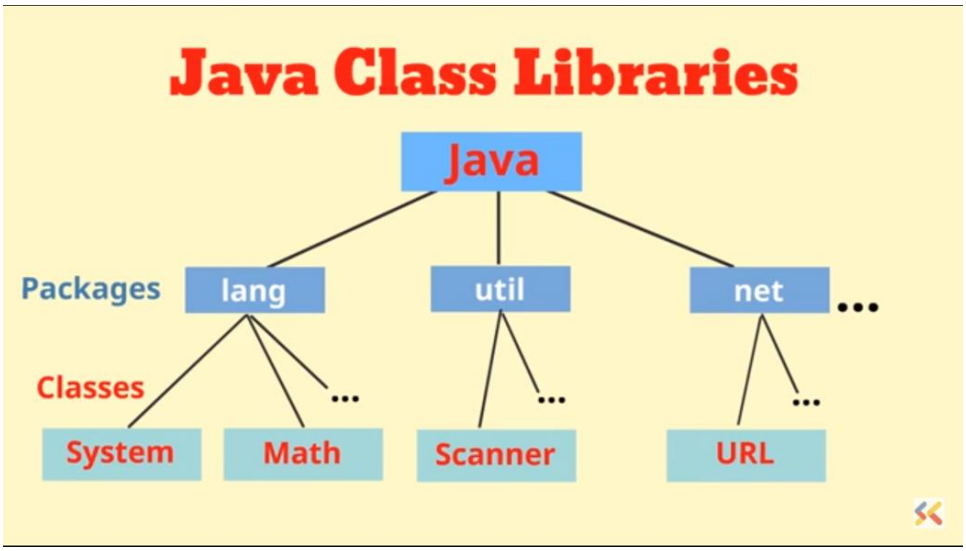
  - Different modifiers allow for different abilities and accessibilities to be open to the user. No two are the same.
- Actual Parameter: The parameter passed by the client is known as the actual parameter.
  - 

  - During a function call the first actual parameter is assigned to the first formal parameter, the second actual parameter is assigned to the second formal parameter, etc.
  - User inputs that are assigned to the formal parameters
- Argument: Similar to actual parameters, it is the values that are to be used within a specific program.

- 

  - a way for you to provide more information to a function
- Boundary Values: Minimum and maximum, extreme ends that will cause the program to not execute if it were to exit that range.
  - 

- Call: When you need to run a function, you will call that function. Functions are first programmed and without calling the function it will not execute.
CALL BY VALUE	CALL BY REFERENCE
CALLING FUNCTION SENDS COPIES TO DATA.	CALLING FUNCTION SENDS ADDRESS OF DATA.
THE FORMAL PARAMETERS ARE ORDINARY VARIABLES.	THE FORMAL PARAMETERS ARE POINTER VARIABLE.
ATMOST ONLY ONE VALUES CAN BE SENT BACK TO THE CALLING FUNCTION.	SEVERAL RESULTS CAN BE SENT BACK TO THE CALLING FUNCTION.
ACTUAL PARAMETERS ARE AFFECTED BY CHANGES MADE WITHIN THE FUNCTION.	DIRECT CHANGES ARE MADE TO THE ACTUAL PARAMETERS.
- Class Libraries: Predefined modules that programmers can call to open to act as templates for their programs. Used in object oriented programming.



- Different class libraries give access to different abilities within that programming language. Sometimes you must declare and import the class library in order to execute that function or ability.

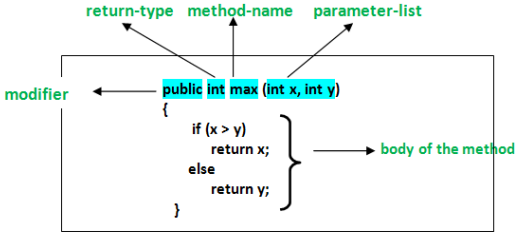
- Class Method: method which is bound to the class and not the object of the class
  - Public class ____:

S-V

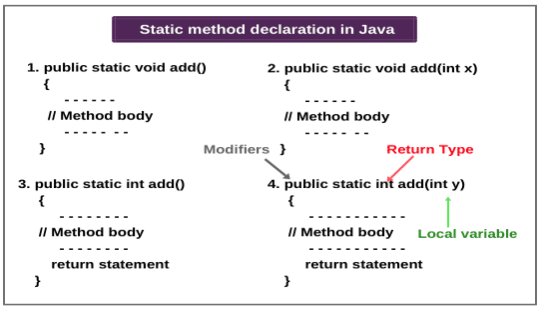
- Scope: defines where a certain variable or method is accessible and/or usable in a program

Variable Type	Scope
Instance variable	Troughout the class except in static methods
Class variable	Troughout the class
Local variable	Within the block in which it is declared

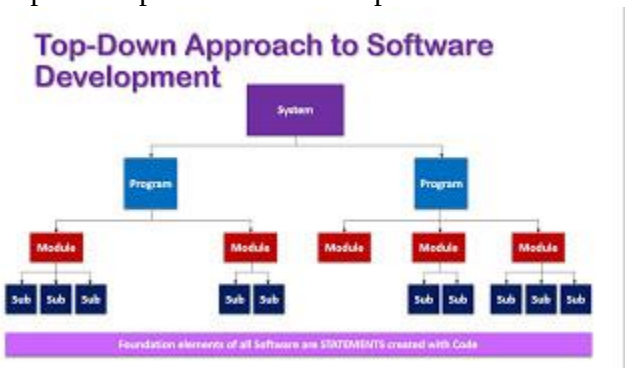
- Signature of Method: the foundation or build of the method; the way the programmer decided to structure his method, calls, functions, etc. (must still follow rules)



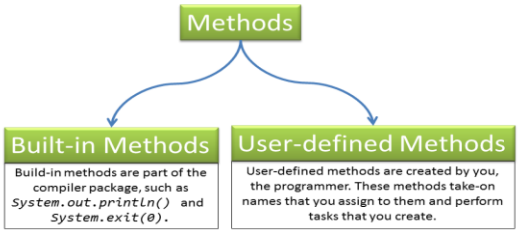
- Static Method: Static can be applied to variables, methods and nested classes within a class. The static keyword in Java is used to share the same variable or method of a given class



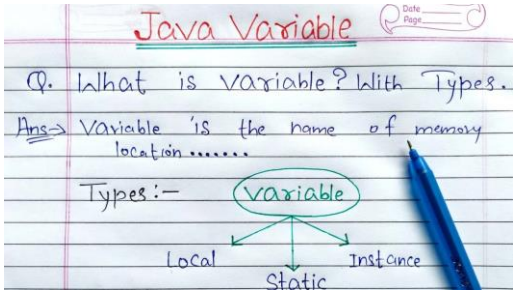
- Top-Down Development: the focus is on breaking the bigger problem into smaller one and then repeat the process with each problem



- User-defined method: The method written by the user or programmer is known as a user-defined method. These methods are modified according to the requirement.



- Value-returning method: returns a value of some specific type. User must say what type it intends to return.
- Variable: Value that can change throughout the program, usually must be declared. Named with an identifier



- Visibility: keywords in object-oriented languages that set the accessibility of classes, methods, and other members

Modifier	Description
public	visible everywhere
private	visible inside the same class only
internal	visible inside the same module
protected	visible inside the same class and its subclasses

- Void Method: Methods that do not have a return data type