Day 4: Oops

Type of variable or fields

1. Instance variable
   1. The variable which we declare inside a class but outside a method including main method is known as instance variable.
   2. Instance variable hold default value base upon type of variable

Int family -🡪 0

Float family 🡪0.0

Char 🡪 space (white)

Boolean 🡪 false

String 🡪 null

* 1. If variable instance we can access the value of that variable inside a any method. but method must be part of same class and it must be non-static.

1. Local variable
   1. The variable which declared inside a method including main method is known a local variable.
   2. Local variable doesn’t hold default value we need initialize.
   3. The scope of that variable within that method where it declared.
2. Static variable

When local variable or parameter variable and instance variable have same name local variable/parameter variable hide the visibility of instance variable.

So if want to refer to instance variable we need to use this.variable name. this keyword refer to current object.

**Constructor :**

Constructor is a type of special method which help to create the memory.

1. Constructor have same name as class itself.
2. Constructor no return type not even void also.
3. Constructor no need to call it will call automatically when we create the object.
4. By default JVM provide default empty constructor. If we want to some task whenever memory get created then we can write explicitly empty or parameter constructor. Initialization.

**Encapsulation :**

Binding or wrapping data(variable) and code(method/funtions) in a single unit is known as Encapsulation

Example : class