# Object oriented programming

- 1. Abstraction- $\rightarrow$  show what is essential, hide what is non essential
- 2. Encapsulation-→ encapsulate data and member and write them together inside a class
- 3. Inheritance
- 4. Polymorphism

Inside class there are various methods and those are categorised as follows

#### 1. Constructor

- It is always public.
- Then name of the function and the class name should be same
- It does not have return type.
- Constructors are overloaded.
- These functions are called for initialization of objects.

# 2. Destructor

These are functions which does the cleanup activity, but in java most of the times destructor is not written inside the class, because garbage collector takes care of releasing the resources in the heap area.

But if sometimes you want to write the destructor, then the name of the function has to be finalize();

### 3. Accessor (getter methods)

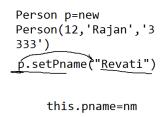
If you want to access the value of the one of the member of the class, the use accessor or setter methods

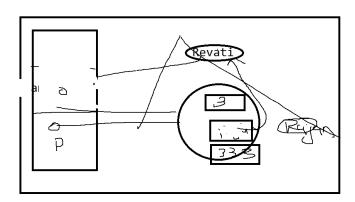
# 4. Mutator(setter methods)

After object is initialized, then if you want to modify the value of one of the member then use mutators(setter functions)

# 5. Member methods

To perform any activity on single object, use member methods.





# Static variable in the class

- 1. If you want to share a memory location among all objects of the class
- 2. If you want to initialize the variable before creation of first object of the class.

static function or static block can access only static variables, and cannot access instance variables.