Notes on OOP Java

What are classes?
Consider them as a group of objects which have similar properties.

So what are objects ?
An entity that has state and behavior.

Objects contains 3 characteristics
1. State- it represents the data .
2. Behavior- It represents the functionality.
3. Identity- Unique ID , it is used by JVM to identify each object uniquely.

Example - Consider a Pen as object
State- suppose it's color is White .
Behavior - The functionality is that it writes

Let us understand Class

Suppose we want to manufacture a car.

We created a class named Car
So Car contains -> Engine, Chassis, Color, Brakes etc.. (These are known as Objects).
Every car contains such parts but the values of these properties are different.

Example - Consider A human as a class.
All the human have hand , nose , legs, brain etc. known as objects but the length of hand, legs varies from person to person. So the main concept is that Class are the template or a blueprint with different objects.
Objects - they are instance of a class (stuff that represents the class).

Class- It is only Logical
Object Physical or Logical (It is the actual stuff that take memory in our system). **They are stored in HEAP memory.**

How to access the properties of a Class?
Using (.)