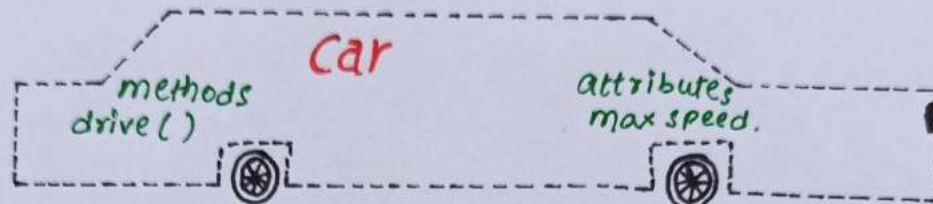


# ★ CONCEPT OF OOP ★

## 1. CLASS:-

A class is like a blueprint of data member and functions  
class is a user-defined data type which holds its own data.



(Fig: class)

```
Class Student
{
    char name;
    int roll no.;
    void attend classes ( )
    {
        // ...
    }
}
```

← Class name

← characteristics

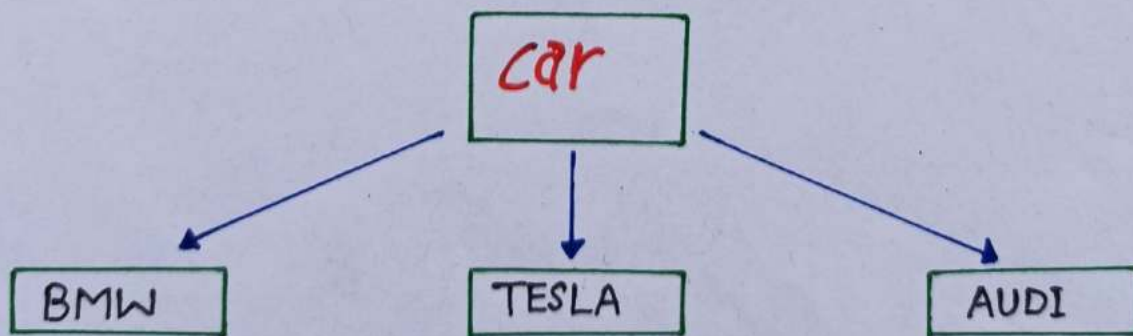
← Function.

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## 2. OBJECT

An object is a self-contained component which consists of methods and properties to make data useful.

Each object is an instance of a particular class.

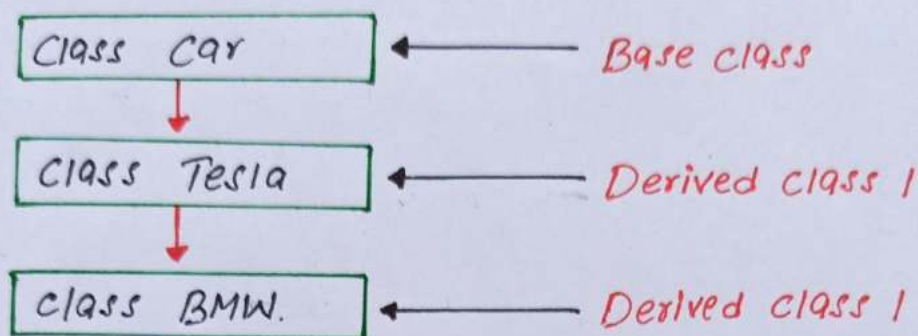


(Fig: Object)



### 3. INHERITANCE :-

Inheritance is a mechanism where the sub or child class inherits the properties and characteristics of super class.



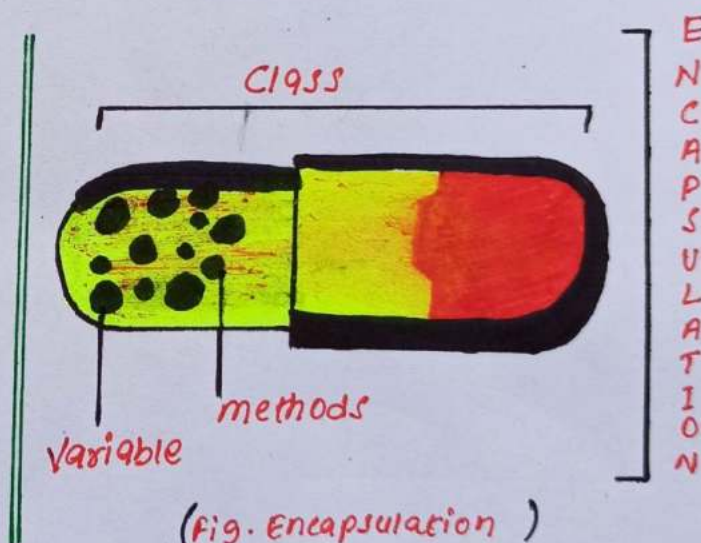
(Fig. Inheritance)

### 4. ENCAPSULATION :-

Encapsulation is a concept that binds data together and functions that manipulate the data, and that keeps both safe and outside interference.

Example :- calculator.

```
Class
{
  data members
  +
  methods (behaviour)
}
```

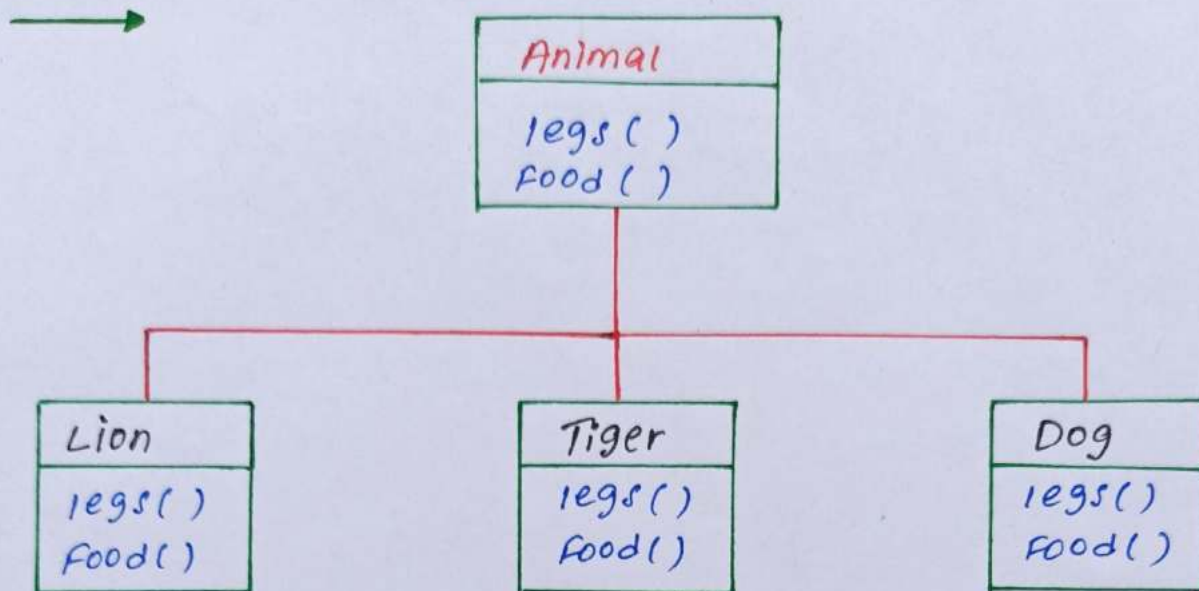


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### 5. ABSTRACTION :-

Abstraction is the concept of OOP that "shows" only essential attributes and hides unnecessary information.

Continue →

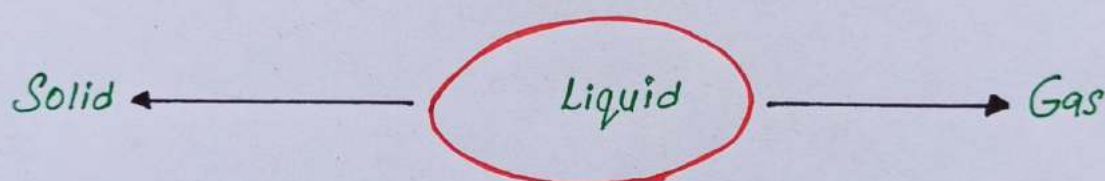


(Fig. Abstraction)

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## 6. POLYMORPHISM :-

Polymorphism is a method in an OOP. that performs different things as per objects class, which calls it.



(Fig. Polymorphism.)

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