Class and object

Class is a logical entity which defines the state and behaviour of an object. Object is a physical entity which has its own state and behaviour.

States represent the characteristic of an object. Behaviour represents functionality of an object. States are defined using non-static member variable. Behaviour is defined using non-static member functions. Non-static members are also called as an instance variable.

We can create any number of object for the class, object differ in the value of the states.

Reference variable

Reference variable is a non-primitive type variable created using class name. Reference variable is used to hold address of an object.

```
Class Pen
{
 States(Non-static member variables)
String brand;
int Price;

behaviour(Non-static member functions)

void write()
{
System.out.println("The brand of pen is "+brand);
}

Public static void main(String args[])
{
Pen p=new pen();
p.brand="Cello";
p.prince=100;
}
}
```

The same value is common throughout application then declare that as a static member.
Eg: Collegename is student class, which remains same throughout the student class it's a static.

If value is different everytime, then create it as a non-static member.