Role of instance variable OR Non static field (Object Properties) while creating an object.

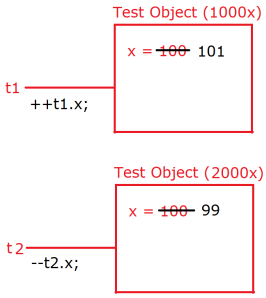
In java, Whenever we create an object, a separate copy of all the instance variables will be created with each and every object.

```
public class Test
{
  int x = 100;

  public static void main(String [] args)
  {
    Test t1 = new Test();
    Test t2 = new Test();

     ++t1.x;     --t2.x;

     System.out.println(t1.x); //101
     System.out.println(t2.x); //99
  }
}
```



What is the role of class variable OR static field in Object creation ?

What is a static field ?

It is a variable which we should declare at class level.

If we declare a variable inside a class with static modifier then it is called static field OR Class Variable.

In order to access the static field, Object is not required, We can access the static field with the help of class name.

A static field is automatically created and initialized with default value at THE TIME LOADING THE .CLASS FILE INTO JVM MEMORY.

Whenever we create an object in java then a single copy of static field will be created and the same single copy will be sharable by all the objects.

*

```
public class Demo
{
    static int x = 100;

    public static void main(String[] args)
    {
        Demo d1 = new Demo();
        Demo d2 = new Demo();

        --d1.x;   --d2.x;

        System.out.println(d1.x); //98
        System.out.println(d2.x); //98
    }
}
```