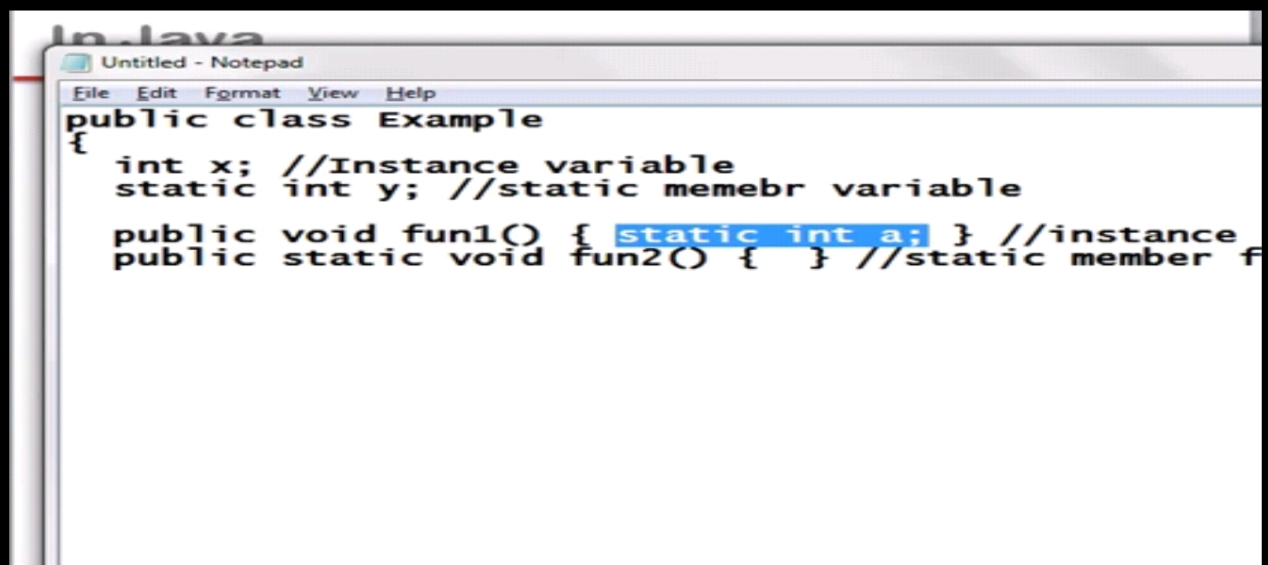


## In Java

---

- ☐ Static member variable
- ☐ Static member function
- ☐ ...and not static variable in methods
- ☐ ...but we can have static inner class





```
public class Example
{
    int x; //Instance variable
    static int y; //static memebr variable

    public void fun1() { static int a; } //instance
    public static void fun2() { } //static member f
```

## Static variables

---

- ☐ Static variables are declared in the class using **static** keyword.
- ☐ Static variables are by default initialized to its default value
- ☐ Static variable has a single copy for the whole class and does not depend on the objects



## Static variables

```
Untitled - Notepad
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public class Example
{
    int x; //Instance variable
    static int y; //static member variable

    public void fun1() { } //instance member function
    public static void fun2() { } //static member function

    static class Test
    {
    }
    public static void main(String[] args)
    {
        Example ex1=new Example();
        Example ex2=new Example();
    }
}
```

## Static function

---

- ☐ Static functions defined inside the class are qualified with the keyword static
- ☐ Static function can only access static members of the same class
- ☐ Static function can be invoked using class name and dot operator



## Static variables

```
Untitled - Notepad
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public class Example
{
    int x; //Instance variable
    static int y; //static member variable

    public void fun1() { } //instance member function
    public static void fun2() { } //static member function

    static class Test
    {
    }
    public static void main(String[] args)
    {
        Example ex1=new Example();
        Example ex2=new Example();
        Example.y=5;
    }
}
```

I

```
class Example
{
    int x; //Instance variable
    private static int y; //static member variable

    public void fun1() { } //instance member function
    public static void fun2() { y=4;} //static member function

    static class Test
    {
        public static String country="INDIA";
    }
}

public class Hello
{
    public static void main(String[] args)
    {
        Example ex1=new Example();
        Example ex2=new Example();

        Example.fun2();
        System.out.println(Example.Test.country);
    }
}
```

## Static class

---

- ☐ We can have a class inside a class which is known as inner class
- ☐ Inner class can be qualified with the keyword static

