Inner Classes

- Inner classes are classes defined inside other classes.
- Inner classes have access to all the members of the outer classes.
- Usually we use inner classes as helper classes of adapter classes.
- Inner classes can be anonymous (without names)

Syntax

```
class MyOuter
 {
class MyInner { }
}
```

Example

```
public class valan{
  class inner    {
      void display()
       {
           System.out.println("Inner Class demo");
       }
    }
    void call()
    {
       inner in=new inner();
       in.display();
    }
    public static void main(String args[])    {
       valan obj=new valan();
       obj.call();
    }  }
```

Inner Class demo

Static Inner Class

```
public class valan
{
  static class inner
    {
      void display()
        {
          System.out.println("Static Inner Class demo");
        }
    }
        public static void main(String args[])
    {
        valan.inner obj=new valan.inner();
        obj.display();
    } }
```

Static Inner Class demo

Method-Local Inner Classes

```
public class valan{
  void display()
    {
     class inner{
        void show(){
            System.out.println("Local Inner Class") ;
         }
     }
     inner in=new inner();
     in.show();
    }
  public static void main(String args[])    {
        valan obj=new valan();
        obj.display();     } }
```


Local Inner Class

ANONYMOUS INNER CLASS

```
PUBLIC CLASS VALAN{
 INTERFACE INNER{
    VOID SHOW();   }
 VOID CALL(){
    INNER IN=NEW INNER()
    {
      PUBLIC VOID SHOW(){
          SYSTEM.OUT.PRINTLN("ANONYMOUS INNER CLASS");
       }
    };
    IN.SHOW();   }
 PUBLIC STATIC VOID MAIN(STRING ARGS[])
    NEW VALAN().CALL();     } }
```

Anonymous Inner Class