

### Nested Classes :-

Only such nested classes are considered as "inner classes" which are not static and which do not have static fields or methods in them.

- 1) Member Inner Class
- 2) Static Member Class
- 3) Local Inner Class
- 4) Anonymous Inner Class

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Only such nested classes are considered as "inner classes" which are not static and which do not have static fields or methods in them.

#### 1) Member Inner Class :-

- i) It is placed inside the outer class at member level.
- ii) It can be assigned any access modifier.
- iii) It can not be declared as static and can not contain static fields or methods.
- iv) It can inherit from any class and can implement any interface.
- v) It can be declared as abstract.
- vi) It can be declared as final.
- viii) It can access all members of outer class.
- ix) To create its object , object of outer class is needed.

- 2) Static Member Class
- 3) Local Inner Class
- 4) Anonymous Inner Class

```
class ABC {
    private int length = 20;

    protected class PQR    //member inner class
    {
        private int width = 30;

        public void area() {
            System.out.println("Area is : " + (length * width));
        }
    }
}

class AppMain {
    public static void main(String[] args) {

        ABC obj = new ABC();

        ABC.PQR ref = obj.new PQR();

        ref.area();
    }
}
```