Dt : 20/10/2022

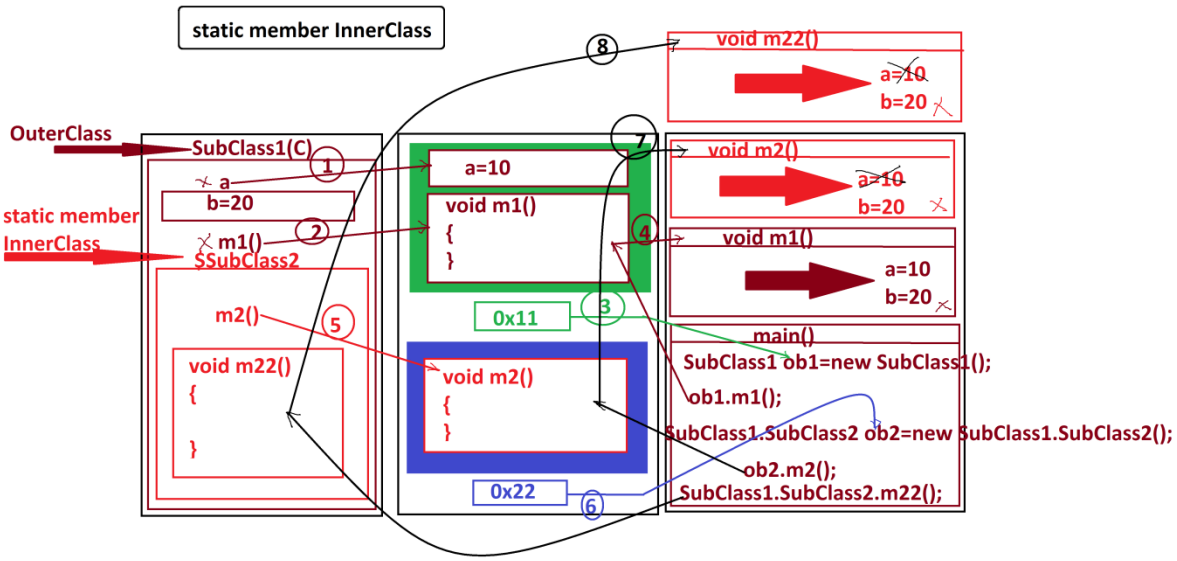
Execution flow of Static member InnerClass:

Classes Files:

SubClass1.class

SubClass1$SubClass2.class

DemoInnerClass1.class(MainClass)



Note:

=>Static member InnerClasses will get the memory within the OuterClass while OuterClass loading.

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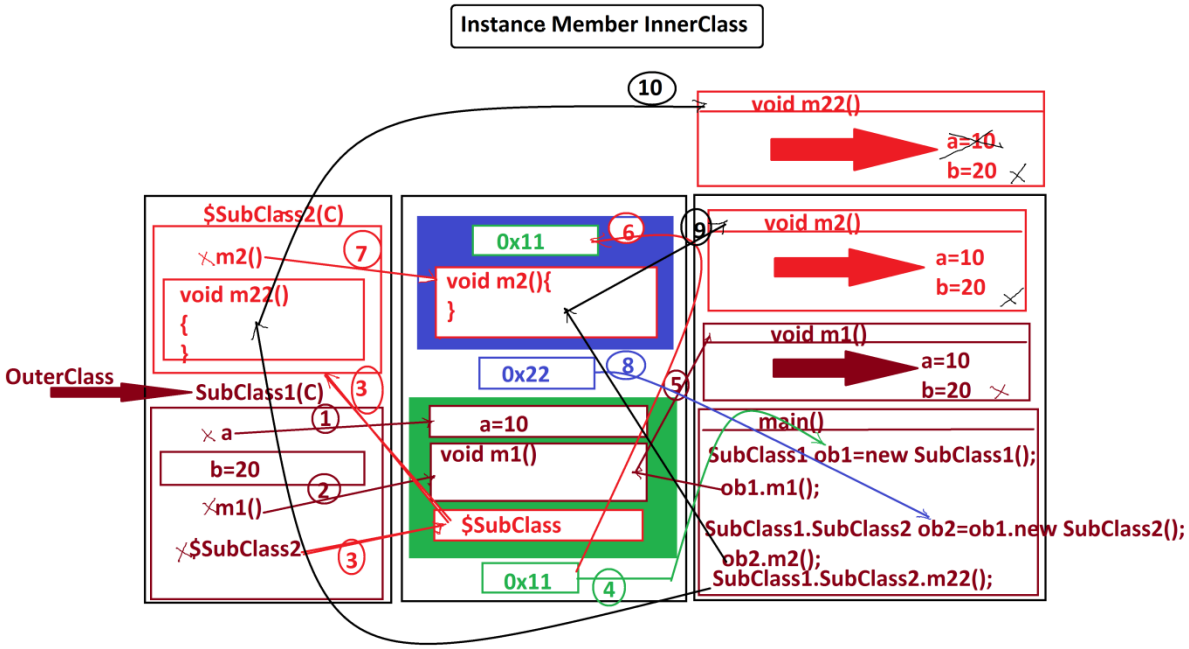
Execution flow of Instance member InnerClass:

ClassFiles:

SubClass1.class

SubClass1$SubClass2.class

DemoInnerClass2.class(MainClass)



Note:

=>In Instance member InnerClasses,InnerClass object will hold the reference of OuterClass object,in this process the members of InnerClass object can access all the members of OuterClass object directly.

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(ii)Local member InnerClasses:

=>The NonStatic member InnerClasses which are declared inside the method of OuterClass are known as Local member InnerClasses.

=>These Local member InnerClasses can be declared inside static and Instance methods of OuterClass.

=>Local InnerClass in Instance method will have behaviour like "Instance member InnerClass"

=>Local InnerClass in Static method will have behaviour like "Static member InnerClass".

Coding Rules:

=>Local InnerClass objects are created inside the methods.

Ex:

SubClass1.java

```
package test;
public class SubClass1 {
    public void m1(int x) {
     class SubClass2{
          public void m2(int x) {
               System.out.println("****Local InnerClass
m2(x)****");
               System.out.println("The value x:"+x);
          }
     }//Local member InnerClass(Instance member InnerClass)
     SubClass2 ob2 = new SubClass2();//Local InnerClass Object
     ob2.m2(x);
    }//OuterClass Instance method
    public static void m2(int y) {
     class SubClass22{
          public void m22(int y) {
               System.out.println("****Local InnerClass
m22(y)****");
               System.out.println("The value y:"+y);
          }
     }//Local member InnerClass(Static member InnerClass)
     SubClass22 ob22 = new SubClass22();//Local InnerClass
Object
     ob22.m22(y);
    }//OuterClass Static method
}//OuterClass
```

DemoInnerClass3.java(MainClass)

```
package maccess;
import test.*;
public class DemoInnerClass3 {
     public static void main(String[] args) {
        SubClass1 ob1 = new SubClass1();//OuterClass object
```

```
        ob1.m1(11);//OuterClass Instance method_call
        SubClass1.m2(12);//OuterClass static method_call
    }
}
```

o/p:

*******Local InnerClass m2(x)*******

The value x:11

*******Local InnerClass m22(y)*******

The value y:12
