7. Writing a program in Java to verify the implementation of inner classes

ALGORITHM

Step 1: Start

Step 2: Define outer class and write display()

Step 3: Define inner class and write display()

Step 4: In main(), Create object for outer class and call outer display()

Step 5: Create object for inner class and call inner display()

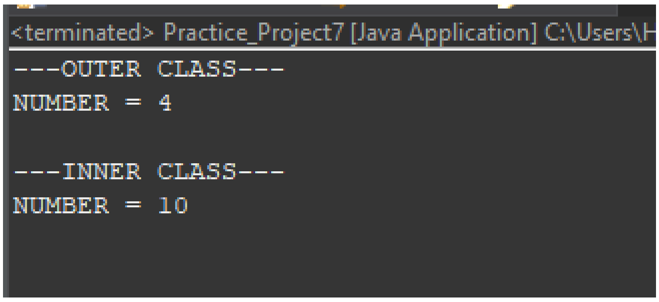
Step 6: Stop

SOURCE CODE

```
package assistedPracticeProject;
class Outer_class //outer class
{
  private int m=4;
  private int n=10;
  public int display()
  {
          System.out.println("---OUTER CLASS---");
          return m;
  }
  public class Inner_class    // inner class
  {
    public int display() {
      System.out.println("\n---INNER CLASS---");
      return n;
    }
  }
}
```

```
public class Practice_Project7

{

            public static void main(String args[]) {

              // Instantiating  outer class

              Outer_class outer = new Outer_class();

              System.out.println("NUMBER = "+outer.display());

              // Instantiating  inner class

              Outer_class.Inner_class inner = outer.new Inner_class();

              System.out.println("NUMBER = "+inner.display());

            }

}
```

OUTPUT



```
<terminated> Practice_Project7 [Java Application] C:\Users\H
---OUTER CLASS---
NUMBER = 4

---INNER CLASS---
NUMBER = 10
```