10. Ibarra Gaona Ronny Joel

SINGLETON PATTERNS:

```java
package ec.edu.espe.code.model;

/**
 *
 * @author Ronny Ibarra, DCCO-ESPE, DEES Syntax Error.
 */
public class USTax {
    private static USTax instance;

    private USTax() {
    }

    public static USTax getInstance() {
    if(instance == null)
    instance = new USTax();
    return instance;
    }

public float salesTotal() {
    System.out.println("Singleton");
        return 0;
    }
    }
```
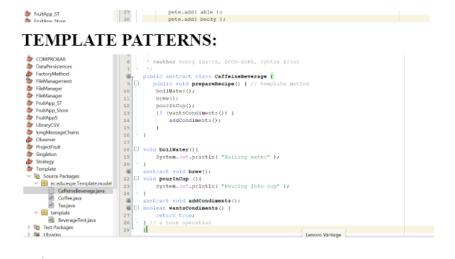
COMPOSITE PATTERNS:

```java
package ec.edu.espe.Composite.model;

/**
 *
 * @author Ronny Ibarra, DCCO-ESPE Syntax Error
 */
public class Clerk extends Employee {
    public Clerk( String aName ) {
        this();
        name = aName;
    }

    public void stateName() {
        super.stateName();
    }

    public Clerk() {
        title = "Clerk";
    }
}
```

```
37          pete.add( able );
38          pete.add( becky );
```

TEMPLATE PATTERNS:

```
 6   * @author Ronny Ibarra, DCCO-ESPE, Syntax Error
 7   */
 8   public abstract class CaffeineBeverage {
 9      public void prepareRecipe() { // template method
10          boilWater();
11          brew();
12          pourInCup();
13          if (wantsCondiments()) {
14              addCondiments();
15          }
16      }
17
18   void boilWater(){
19       System.out.println( "Boiling water" );
20   }
21   abstract void brew();
22   void pourInCup (){
23       System.out.println( "Pouring into cup" );
24   }
25   abstract void addCondiments();
26   boolean wantsCondiments() {
27       return true;
28   } // a hook operation
29 }
```

File tree:
- COMPROBAR
- DataPersistences
- FactoryMethod
- FileManagement
- FileManager
- FileManager
- FruitApp_ST
- FruitApp_Store
- FruitAppS
- LibraryCSV
- longMessageChains
- Observer
- ProjectFruit
- Singleton
- Strategy
- Template
  - Source Packages
    - ec.edu.espe.Template.model
      - CaffeineBeverage.java
      - Coffee.java
      - Tea.java
    - template
      - BeverageTest.java
  - Test Packages
  - Libraries

ABSTRACT PATTERNS:

```
import java.awt.Button;

/**
 *
 * @author Ronny Ibarra, DCCO-ESPE, Syntax Error
 */
public class LinuxButton extends Button {

    public LinuxButton() {
    }

}
```

FACTORY PATTERNS:

```java
/**
 *
 * @author Ronny Ibarra, DCCO-ESPE, Syntax Error
 */
public class FactoryOne extends Factory {

    @Override
    protected Object createConnection(String type) {
        if (type.equals("Oracle")){
        return new OracleConnection();
        }
        else{
        return new MySqlConnection();
        }
    }

}
```

STRATEGY PATTERNS:

```java
/**
 *
 * @author Ronny Ibarra, DCCO-ESPE, Syntax Error
 */
public class BubbleSort implements SortingStrategy {

    @Override
    public int[] sort(int[] data) {
        System.out.println("que mas pues");
        return null;
    }

}
```