

Try following code. What is the outcome? Why?

Class 01:

```
final class Student {  
    final int marks = 100;  
    final void display();  
}
```

Class 02:

```
class Undergraduate extends Student{}
```

The code you provided has a compilation error. Let's go through the issues:

- In Class 01, you have declared the class Student as final. This means that the class cannot be subclassed or extended. However, in Class 02, you are attempting to create a subclass called Undergraduate that extends Student. This is not allowed because Student is declared as final.
- Inside Class 01, you have declared an int variable called marks with the final keyword. This makes the variable a constant, and its value cannot be changed once assigned. However, you have not initialized the marks variable with a value. It should be assigned a value during declaration or in a constructor.
- You have also declared a final method called display() in Class 01. A final method cannot be overridden by subclasses. However, you haven't provided an implementation for the display() method. It should either have a method body or be declared as abstract if you want the subclasses to provide an implementation.

To fix the issues, you can modify the code as follows:

```
class Student {  
    final int marks = 100;  
    final void display() {  
        System.out.println("Displaying student information.");  
    }  
}  
  
class Undergraduate extends Student {  
    // Additional methods or overrides can be defined here  
}
```