Java Practical 05

Exercise 01

Declare an interface called “MyFirstInterface”. Decalre integer type variable called “x”. Declare an abstract method called “display()”.

1. Try to declare the variable with/without public static final keywords. Is there any difference between these two approaches? Why?

   In an interface, all variables are implicitly public, static, and final. So, explicitly using the public static final keywords while declaring a variable in an interface is redundant. Both ways are valid, but conventionally, you should only declare the variable without these keywords since they are automatically applied by the Java compiler.

2. Declare the abstract method with/without abstract keyword. Is there any difference between these two approaches? Why?

   When declaring a method in an interface, it is implicitly abstract, even if you don't use the abstract keyword. So, explicitly adding the abstract keyword is unnecessary. Both ways are valid, but conventionally, you should only declare the method without the abstract keyword since it is automatically considered abstract by the Java compiler.

3. Implement this into a class called “IntefaceImplemented” . Override all the abstract methods. Try to change the value of x inside this method and print the value of x. Is it possible for you to change x? why?

   In the class InterfaceImplemented, we have overridden the abstract method display() from the interface MyFirstInterface. However, trying to change the value of x inside the display() method will result in a compilation error. This is because variables in interfaces are implicitly final (constants) and cannot be reassigned once they are initialized. Any attempt to change the value of x in the implementing class will cause a compilation error.