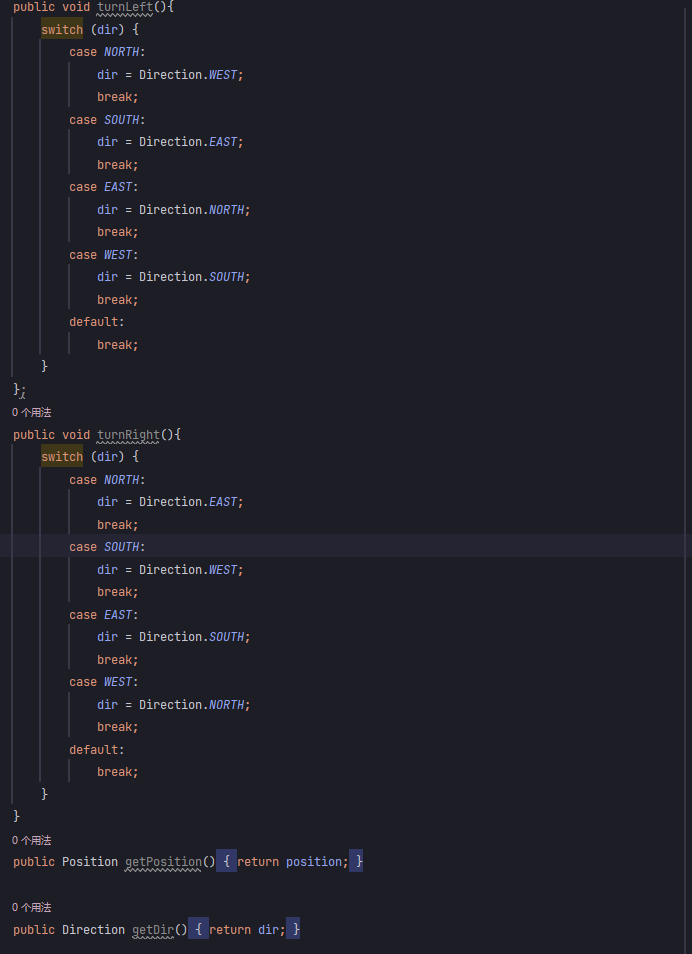
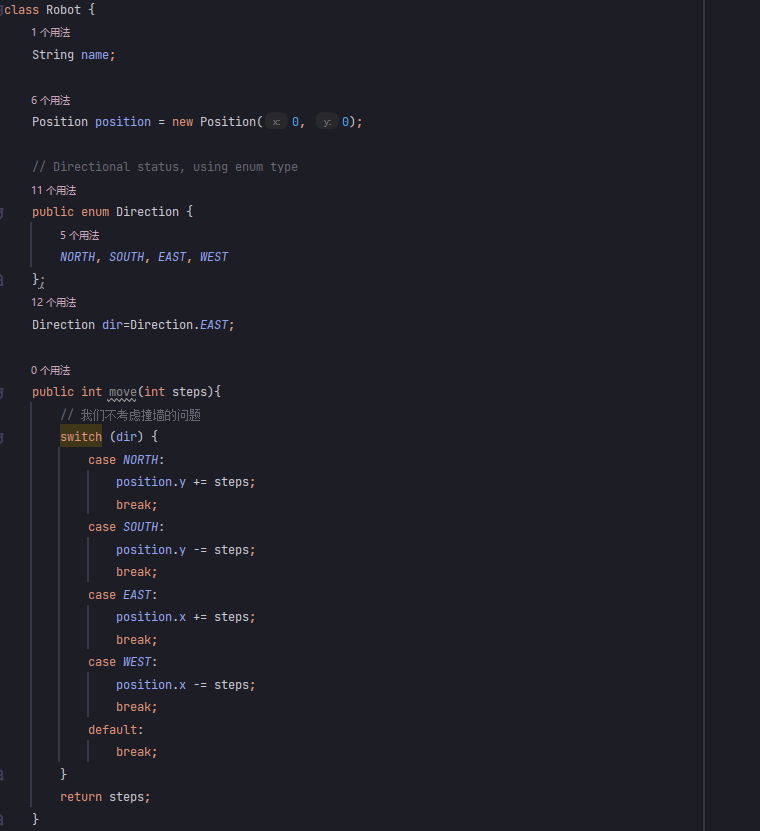
**Quiz for Java Programming** (Tutor: cyd@bupt.edu.cn)

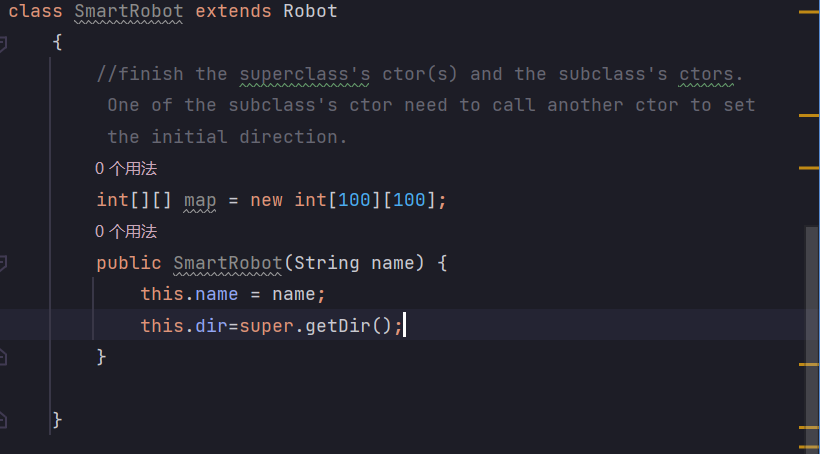
Unit03-Inheritance and Polymophism

1. A parent class is also called superclass class in java and a child class is called subclass class
2. Keyword "super" may be used to call a superclass constructor or a superclass method
3. In C++ inheritance, the child class may call the parent class's ctor by : PrarentClassCtr .
4. T[T/F] "super" may appear anywhere in the subclass's method body.
5. T[T/F] No matter if we explicit give a ctor, the compiler will generate a default ctor.
6. T[T/F] A non-private static method in super class can be inherited and overrided by its subclass .
7. T[T/F] Both C++ and java classes are derived from the Object class.
8. T[T/F] An initialization block is executed as if it were placed at the beginning of every constructor in the class
9. Write a class Robot, which has a name and may move(steps) , turnLeft(), turnRight() and getPosition(). getPosition() returns an object which holds the coordinates. It also needs a directional status (which are south, north, east or west). Write a sub class SmartRobot, which has a two-dimensional array to record each step.

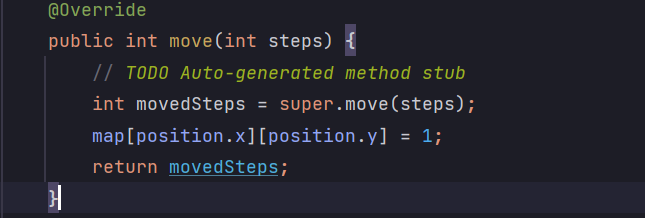




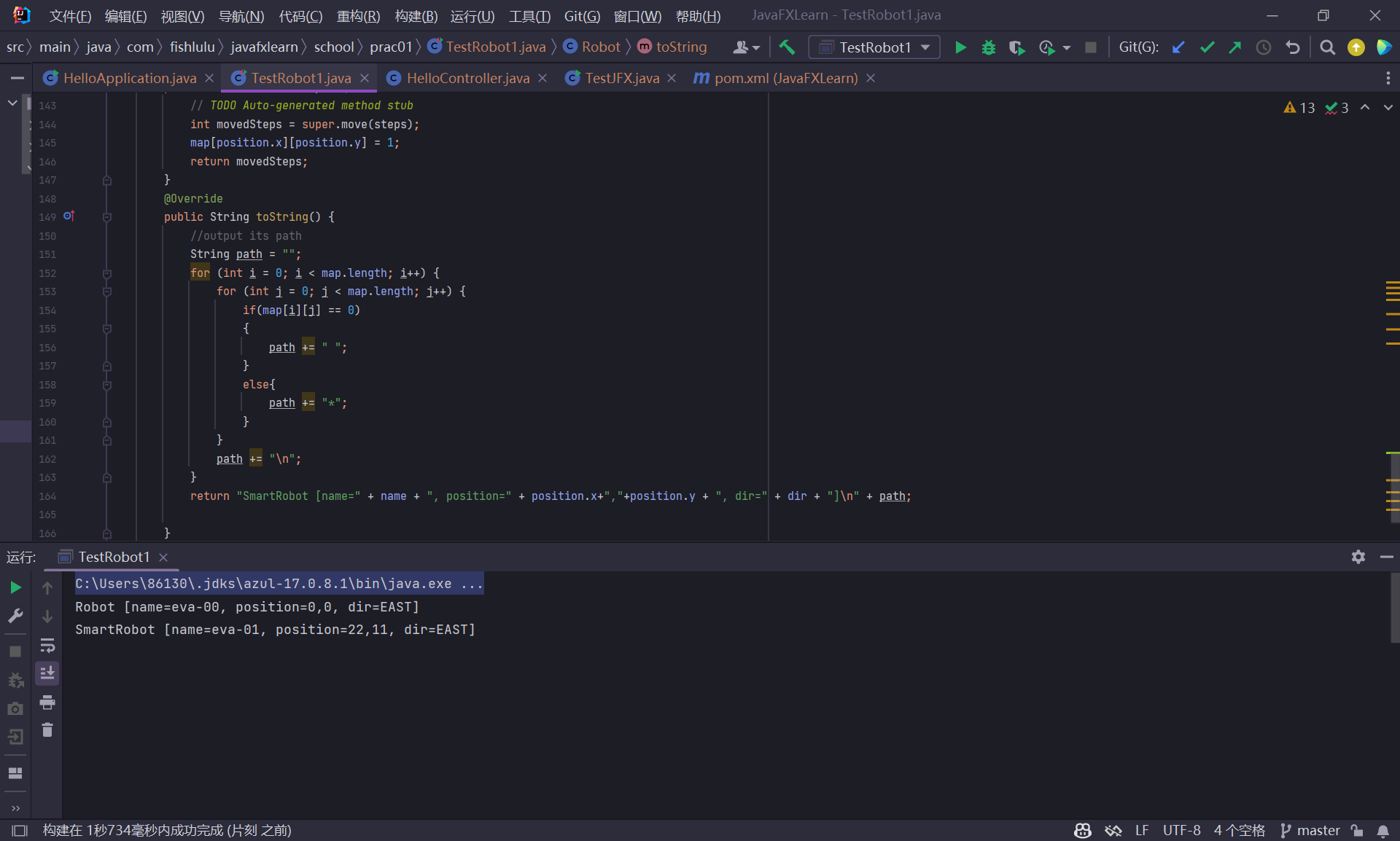
1. Based on Quiz [9,](#_bookmark0) finish the superclass's ctor(s) and the subclass's ctors. One of the subclass's ctor need to call another ctor to set the initial direction.



1. Based on Quiz[10,](#_bookmark1) override the methods of Robot in SmartRobot class, which may record the path that the SmartRobot object moves.



1. Based on Quiz[11,](#_bookmark2) override toString() in Robot to output its coordinates and toString() in SmartRobot classes to output its path. In main(), test these two toString() methods.



1. Based on Quiz [12,](#_bookmark3) in main(), create at least one Robot object and one SmartRobot object and assign all these objects to a Robot array. Call the methods of Robot and SmartRobot objects by the Robot array and output the coordinates or paths.

