

# Northern Michigan University (Marquette Co, MI)

CS345-01-23W: Android Programming (Andrew A. Poe)  
Quiz 6

Name: \_\_\_\_\_  
Friday 24 March 2023 1:00 P.M. EDT

Time: 15 minutes

I have an Athlete class that contains no data, but it does contain a method Practice() which simply prints three lines: "Here I go to practice." "Here I am at practice." "I'm done with practice."

When a basketball player runs Practice(), however, it prints another line between the second and third: "I'm bouncing a ball." When a swimmer runs Practice(), it prints a different line between the second and third: "I'm doing laps."

Using inheritance and method overriding, define the classes and methods needed to pull this off. You can't have a variable store what sport the athlete plays, and you can't use if statements in your methods. Minimize repeated code as much as possible.

```
class Athlete {  
  
    fun Practice () {  
  
        println ("Here I go to practice.")  
        println ("Here I am at practice.")  
        SpecificSport () {  
            println ("I'm done with practice.")  
        }  
  
        open fun SpecificSport () {  
        }  
    }  
  
class BasketballPlayer: Athlete (  
  
    override fun SpecificSport () {  
  
        println ("I'm bouncing a ball.")  
    }  
}  
  
class Swimmer: Athlete {  
  
    override fun SpecificSport () {  
  
        println ("I'm doing laps.")  
    }  
}
```