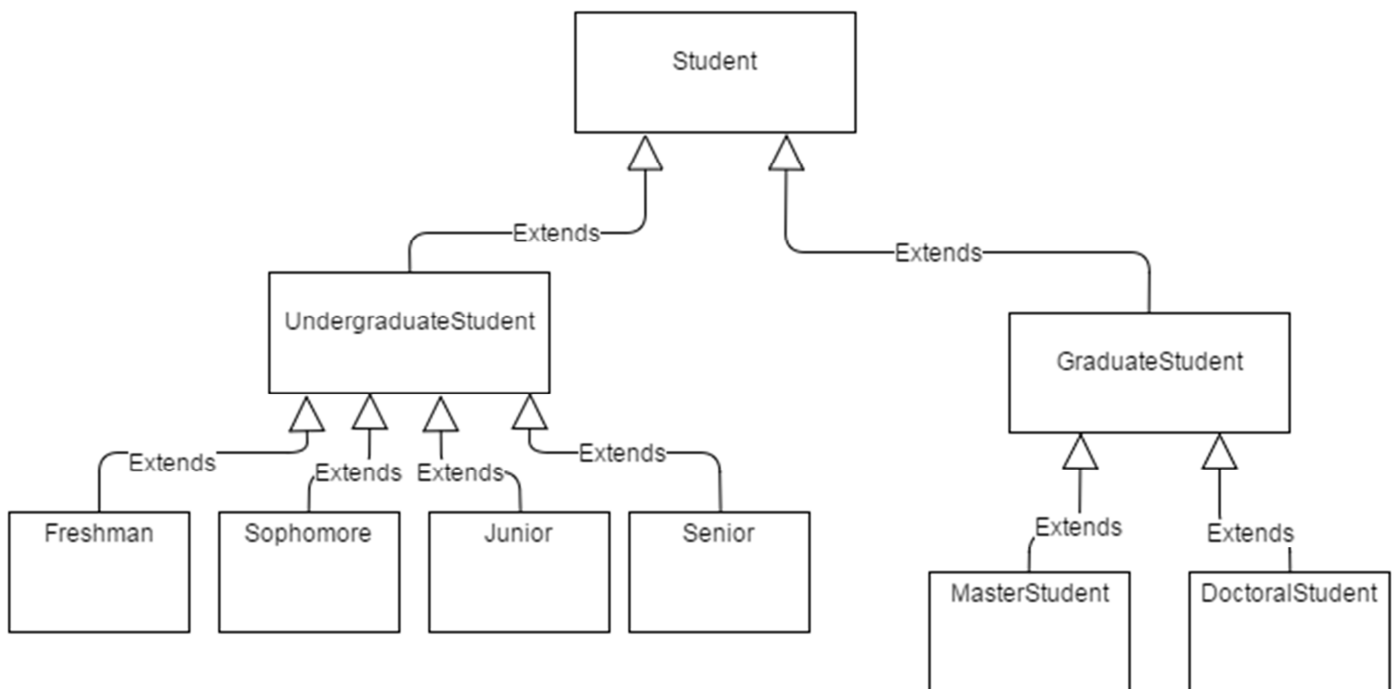


1.

- (1) True. The reason of that is the name being changed.
- (2) False. An *is-a* relationship is implemented via **inheritance**, because of definition.
- (3) False. A **Student** class has an *has-a* relationship with the **Faculty** and **Course** classes. Because **Student** is not a kind of **Faculty** or **Course** but a human.
- (4) True. Private members are always inaccessible to the derived class no matter what relationship between them.
- (5) False. A base class's protected members can be accessed in the base-class definition, in derived-class definitions and **in friends of the base class**. Not include its friend's derived classes, because my friend's child is not my friend. Therefore they cannot access my protected members.

2.



From this photo, we can observe:

UndergraduateStudent and GraduateStudent *is-a* Student

Freshman, Sophomore, Junior, and Senior *is-a* UndergraduateStudent

MasterStudent and DoctoralStudent *is-a* GraduateStudent