Lab 6

1.
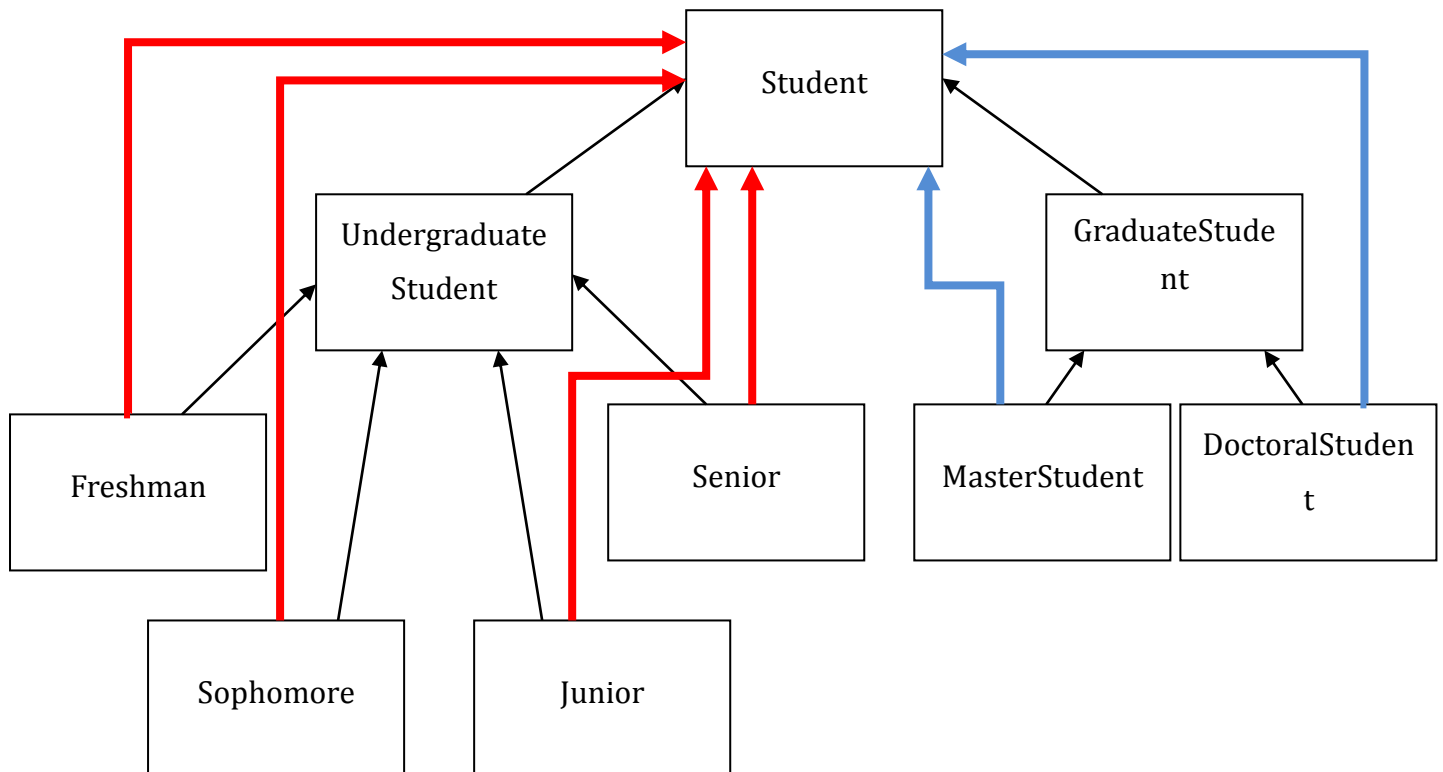
(1)true.

(2)false.A is-a statement is implemented via inheritance,not via composition.(An has-a relationship is implemented via composition.)

(3) false.Private members of a private base class are hidden to the derived class.

(4)true.

2.

For Freshman, Sophomore, Junior and Senior that derive from UndergraduateStudent,they inherit the attributes of UndergraduateStudent like study in university.And they also inherit the attribute of Student like go to school,sleep,eat.Similarly, MasterStudent and DoctoralStudent that derive from GraduateStudent inherit the attributes of GraduateStudent like study in a lab,write papers.Also,they inherit the attribute of Student.

We can conclude that：

For Freshman, Sophomore, Junior and Senior,their base class are UndergraduateStudent and Student.

For UndergraduateStudent,its derived class are Freshman, Sophomore, Junior and Senior,and its base class is Student.

For MasterStudent and DoctoralStudent,their base class are GraduateStudent and Student.

For GraduateStudent,its derived class are MasterStudent and DoctoralStudent,and its base class is Student.