1.

(1)true

(2)false

an is-a relationship is implemented via inheritance

(3)false

不能說學生是系或課程，因此不是is-a的關係

(4)true

(5)true

2.

**student**

MasterStudent

DoctoralStudent

Junior

Senior

Sophomore

Freshman

UndergraduateStudent

GraduateStudent

Freshman: UndergraduateStudent , student

Sophmore: UndergraduateStudent , student

Senior: UndergraduateStudent , student

Junior: UndergraduateStudent , student

DoctoralStudent: GraduateStudent , student

MasterStudent: GraduateStudent , student

UndergraduateStudent : student

GraduateStudent : student