## C++ Programming

#7 class 정의 Member initialization list Constructor overloading

2017년 1학기

## 실습 문제

School Name: PNU, Count: 4

Name: Kim GPA: 3.5 Major: Electrical Eng.

Name: Hong GPA: 4.3 Major: Computer Eng.

Name: Lee GPA: 4 Major: Computer Eng.

Name: Joo GPA: 1.5 Major: Mechanical Eng.

School Name: PNU, Count: 4

Name: Hong GPA: 4.3 Major: Computer Eng.

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Name: Kim GPA: 3.5 Major: Electrical Eng.

Name: Joo GPA: 1.5 Major: Mechanical Eng.

```
int main() {
 School pnu("PNU");
 Student* kim = pnu.addStudent("Kim", EE);
 kim->setGPA(3.5F);
 Student* hong = pnu.addStudent("Hong", CE);
 hong->setGPA(4.3F);
 Student* lee = pnu.addStudent("Lee", 4.0F);
 lee->setMajor(CE);
 Student* joo = pnu.addStudent("Joo", 1.5F);
 joo->setMajor(ME);
 pnu.print() ;
                                 School Name: PNU, Count: 4
                                      Name: Kim GPA: 3.5 Major: Electrical Eng.
 pnu.sort() ; // descending
 pnu.print();
                                      Name: Hong GPA: 4.3 Major: Computer Eng.
                                      Name: Lee GPA: 4 Major: Computer Eng.
                                      Name: Joo GPA: 1.5 Major: Mechanical Eng.
                                 School Name: PNU, Count: 4
```

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Name: Hong GPA: 4.3 Major: Computer Eng.

Name: Joo GPA: 1.5 Major: Mechanical Eng.

Name: Lee GPA: 4 Major: Computer Eng. Name: Kim GPA: 3.5 Major: Electrical Eng.

## 제약 조건

```
enum MajorType { CE, EE, ME, UD};
class Major {
private:
    MajorType majorType;
public:
```

```
class Student {
  private:
    string name;
    float gpa;
    Major major;

public:
    ...
};
```

```
class School {
  private:
    string schoolName;
    vector<Student> students;

public:
    ...
};
```

## 제출 방법

- ❖ 제출 위치: PLMS "실습7: class 2"
- ❖ 첨부 파일 이름: 실습7\_이름\_학번.cpp