

VIRTUAL FUNCTIONS

1ST LECTURE - SUPPLEMENT

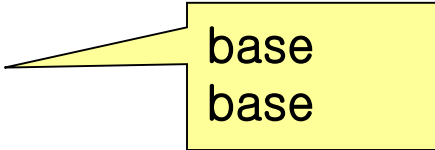
엄현상(Eom, Hyeonsang)
School of Computer Science and Engineering
Seoul National University

Outline

- Virtual Functions
 - Code examples
- Q&A

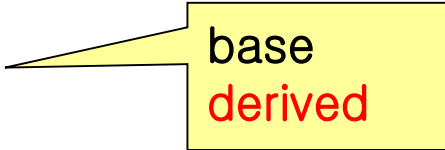
Virtual Functions

```
#include <iostream>
using namespace std;
class A {
public:
    void pr() {
        cout << "base" << endl;
    }
};
class B : public A {
public:
    void pr() {
        cout << "derived" << endl;
    }
};
main () {
    B b;
    A a = b;
    A *pA = &b;
    a.pr();
    pA->pr();
}
```



base
base

```
#include <iostream>
using namespace std;
class A {
public:
    virtual void pr() {
        cout << "base" << endl;
    }
};
class B : public A {
public:
    void pr() {
        cout << "derived" << endl;
    }
};
main () {
    B b;
    A a = b; // What if A &a = b;
    A *pA = &b;
    a.pr();
    pA->pr();
}
```



base
derived