

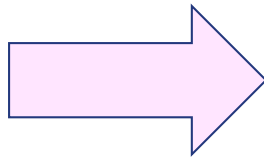
C++ Programming

#5 함수

- 1) enum, struct
- 2) function call
- 3) const parameter
- 4) Call by reference

실습 문제

```
ADD 50 50
ADD 30 30
PRINT
Rectangle Count: 2
    50 50 2500
    30 30 900
SORT
Rectangle Count: 2
    30 30 900
    50 50 2500
ADD 10 10
PRINT
Rectangle Count: 3
    30 30 900
    50 50 2500
    10 10 100
```



```
SORT
Rectangle Count: 3
    10 10 100
    30 30 900
    50 50 2500
CLEAR
PRINT
Rectangle Count: 0
ADD 25 40
ADD 10 20
PRINT
Rectangle Count: 2
    25 40 1000
    10 20 200
SORT
Rectangle Count: 2
    10 20 200
    25 40 1000
EXIT
```

```

void main() {
    vector<Rectangle> rectangles ;
    while ( true ) {
        CommandType command = getCommandType() ;
        switch ( command ) {
            case ADD : {
                const Rectangle& newRectangle = getRectangle() ;
                rectangles.push_back(newRectangle) ;
                break ;
            }
            case PRINT: {
                print(rectangles) ;
                break ;
            }
            case SORT: {
                sort(rectangles) ;
                print(rectangles) ;
                break ;
            }
            case CLEAR : {
                rectangles.clear() ;
                break ;
            }
            case EXIT : {
                break ;
            }
            default: {
                assert (false) ;
                break ;
            }
        }
        if ( command == EXIT ) break ;
    }
}

```

제약 조건

❖ Use the Rectangle and CommandType

```
struct Rectangle {  
    int width ;  
    int height ;  
};
```

```
enum CommandType { ADD, SORT, PRINT, CLEAR, EXIT} ;
```