윈도우즈보안과 운영실습

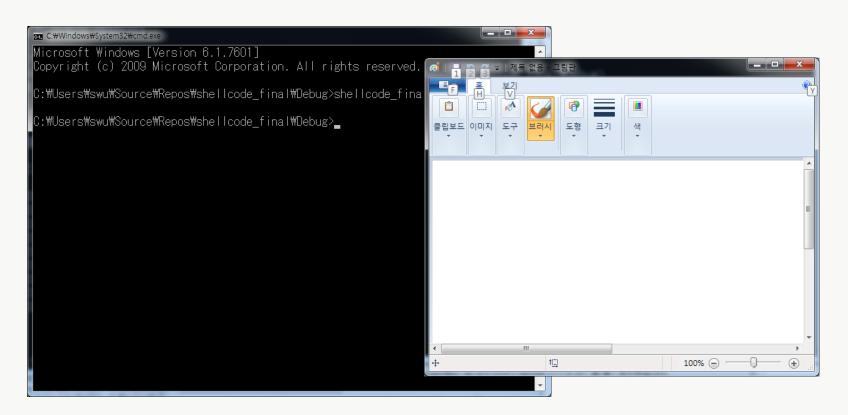
◆ 기말과제

#01. 보고서작성

- 다음의 항목에 대해서 간단하게 설명하시오.(1쪽이내)
 - ① SW 취약점(Vulnerability)
 - ② 제로데이 공격
 - ③ 익스플로잇(Exploit)

#02. 쉘코드 추출 및 보고서 작성

- 다음과 같이 그림판을 실행하는 쉘코드를 작성하고 보고서를 작성하시오. (3쪽이내)
 - 제출파일: CPP, exe 코드
 - 쉘코드를 생성하는 과정에 대해 설명하시오.



#03. 실습 보고서 작성

- 다음의 소스코드를 작성하여 실행하고 오버플로우가 일어나는 과 정에 대해서 설명하시오.(3쪽이내)
 - 제출파일 : CPP, exe 코드
 - 디버깅을 이용하여 stack, hex dump와 레지스터의 변화를 같이 설명하시오.

```
main.cpp X
                                                                                                           #include <stdio.h>
                                                  1
                                                    2
                                                                                                           #include <strina.h>
                                                     3
                                                                                                        char saved password [] = "stack overflow";
                                                     4
                                                     5
                                                                                                int check_password() {
                                                     6
                                                                                                                                     char buffer[30]:
                                                    7
                                                                                                                                     int flag = 0;
                                                     8
                                                     9
                                                                                                                                     printf("password: ");
                                            10
                                                                                                                                     aets(buffer):
                                                                                                                                   if (strcmp(buffer, saved_password) == 0)
                                          11
                                          12
                                                                                                                                                                flaq = 1;
                                         13
                                          14
                                                                                                                                     return flag;
                                         15
                                         16
                                         17
                                                                                            int main(int argc, char *argv[]) {
                                         18
                                                                                                                                     if (check password()) {
                                         19
                                                                                                                                                                 printf("\(\frac{1}{2}\)n*-=-=-=-*");
                                            20
                                                                                                                                                                 printf("\n*| ACCESS ALLOWED |*");
                                                                                                                                                                printf("\mathfrak{"\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"}\mathfrak{"
                                          21
                                            22
                                            23
                                                                                                                                                                printf("\mathbb{'\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'}\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'}\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'}\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'}\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'}\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'}\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'}\mathbb{'}\mathbb{'}\mathbb{'}\mathbb{'}\mathbb{'\mathbb{'}\mathbb{'}\mathbb{'}\math
                                            24
                                            25
                                            26
                                                                                                                                     return 0;
                                            27
```

```
- - X
C:\Windows\System32\cmd.exe
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.
 ::\Users\sww\Documents\CodeBlocks\Stackoverflow_final\bin\Debug>stackoverflow_f
password: stack overflow
*-=-=-=-=X
     ACCESS ALLOWED
 ::\Users\sww\Documents\CodeBlocks\Stackoverflow final\bin\Debug>stackoverflow f
password: password
*****ACCESS DENIED****
 ::\Users\swu\Documents\CodeBlocks\Stackoverflow_final\bin\Debug>stackoverflow_f
password: 1234567890123456789012345678901234
      ACCESS ALLOWED
 :\Users\swu\Documents\CodeBlocks\Stackoverflow_final\bin\Debug>_
```