

LAB



SQL injection

- <http://sqlzoo.net/hack/>

Integers in C

- int representation
 - sizeof(int)
- INT_MAX, INT_MIN, UINT_MAX
- Write a function detecting integer overflow
 - unsigned int plus(intigned int a, unsigned int b)

system(3) in UNIX

- Exploit the code to run arbitrary command
- Set the input variable to some value

```
#include <malloc.h>
#include <stdlib.h>

int main()
{
    char *input = NULL;

    // set input

    input="Hi!";

    //

    char cmdbuf[512];
    int len_wanted = snprintf(
        cmdbuf, sizeof(cmdbuf), "echo '%s'", input);
    if (len_wanted >= sizeof(cmdbuf)) {
        perror("Input too long");
    }
    else if (len_wanted < 0) {
        perror("Encoding error");
    }
    else if (system(cmdbuf) == -1) {
        perror("Error executing input");
    }

    return 0;
}
```