Setup:
The class is to split into teams, which will compete in this exercise.

Your mission:
Exploit the two vulnerabilities in vuln1 and vuln2, and print out the string "You win".

The Rules:
- It is OK if the program crashes after printing "You win".
- The output can contain more than the string "You win", i.e., we only require that a substring of the output is "You win".
- You can run a command line up to 5 times total to test your answer. The first team to successfully print out the message for both vulnerabilities wins.
- To get class participation points for today you must successfully complete the challenge in under 5 tries.

Suggestions:
- Think! Don't guess.
- Identify the likely vulnerabilities
- Draw out the stack diagram for each function

The source to the function winner is:
void winner()
{
    printf("You win!\n");
}

The source to main is:
int main(int argc, char *argv[])
{
    if(argc != 3){
        printf("%s [1|2] <input>\n", argv[0]);
        return 0;
    }
    switch(atoi(argv[1])){
        case 1:  vuln1(argv[2]); break;
        case 2: vuln2(argv[2]); break;
    }
    return;
}

080484c4 <winner>:
080484c4: 55      push %ebp
080484c5: 89 e5    mov %esp,%ebp
080484c7: 83 ec 18 sub $0x18,%esp
080484ca: c7 04 24 b0 86 04 08 movl $0x80486b0,(%esp)
080484d1: e8 16 ff ff ff call 80483ec <puts@plt>
080484d6: c9      leave
080484d7: c3      ret

080484d8 <vuln1>:
080484d8: 55      push %ebp