Lab 7 Exercise 1 - Showing a Stack Memory Error

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**Exercise 1**

We prepare and compile two binaries from L7-ex1.c - one with stack protection (*fstackproc.o* for Q1) and another without (*fnostackproc.o* for Q2).

$ gcc -fstack-protector L7-ex1.c -o fstackproc.o

$ gcc -fno-stack-protector L7-ex1.c -o fnostackproc.o

1. Stack overflows when string input length is more than 8. (seg fault)

$ ./fnostackproc.o

Input: abcdefghi

f = 0x562788d7e321

Enter a string: abcdefghi

string = [abcdefgh

]

Segmentation fault (core dumped)

1. Stack overflows when string input length is more than 8. (stack smashing detected)

$ ./fstackproc.o

Input: abcdefghi

f = 0x560640748364

Enter a string: abcdefghi

string = [abcdefghi]

\*\*\* stack smashing detected \*\*\*: terminated

Aborted (core dumped)

**END**