

L80: Assembly Lab

Note: This work must be completed by the end of the lab on WEEK OF MAR 7

Name: _____ ID: _____

Goals:

1. Be able to use basic x86-64 assembly instructions.

Tasks

- Write an x86-64 assembly language program for Ubuntu that prompts the user for a string and then reads in and stores that string in the .BSS segment. If the string is longer than 9 characters, your program must store only the first 9 of them and print out an error message. At the end of the program, whether or not an error occurred, the contents of the string must be printed out on the screen.
- Below is a successful program run, followed by an unsuccessful run. User input is underlined.

```
Enter the string
12345
12345
```

```
Enter the string
abcdefghijklmnopqrstuvwxyz
String was truncated
abcdefghi
```

- Download the L80 support files. Add your code to l80.asm. Do not remove the last two lines of that file.
- To assemble your program, enter the command `make`
- To test your program manually, enter the command `make run`
- To test your program automatically, enter the command `make test`
- Make sure you pass all automatic tests before submitting your assignment!

Deliverables:

- Hand in your l80.asm source code using D2L and also submit a printed version.
- Do not submit any other files.