

Programming Project #2
CpSc 8270: Language Translation
Computer Science Division, Clemson University
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Due Date:

In order to receive credit for this assignment, your solution must meet the requirements specified in this document and be submitted, using the `handin` web page, by 8 AM, Thursday, September 15th, 2016. The `handin` close date is set at three days after the due date. If you submit after the due date but before the `handin` close date there will be a ten point deduction. No submissions will be accepted after the `handin` close date and no submissions will be accepted by email.

Project Overview:

1337 is an alternative vocabulary and alphabet that is used primarily on the Internet as a specialized form of symbolic writing. 1337 was originally used by computer hackers but it has evolved as a tool for encryption or obfuscation, which some Internet users feel is necessary in help combat the proliferation of hackers attempting to steal passwords and other information. Some of you may already be using 1337; for example, some DPA passwords are encoded in 1337.

Project Specification:

Your assignment is to use the GNU tool, `flex`, to build a translator from *English* to 1337, and from 1337 to English. The purpose of this project is to provide an opportunity for you to learn to use the tool `flex`, and to gain some experience with 1337 translation. To test your 1337 translator we will use your `etol` tool to encode a message from english to 1337, then we will use your `ltoe` tool to decode the message.

If your 1337 translator translates “ordinary” 1337 you will receive 90% as your grade. If you can build a 1337 translator with more obfuscation, or other enhancement or pizzazz, you will receive 100% as your grade.

There are many dialects, or accepted versions of 1337, ranging from basic 1337 to advanced, or pro 1337. One possible enhancement is to translate digits into the corresponding word, so that the digit 1 would translate to *one*, 2 would translate to *two*, etc.

You must submit your assignment using the `web handin` command, which can be found at:

<https://handin.cs.clemson.edu>

There is a lot of information on the Internet about 1337, and there are translators:

<http://en.wikipedia.org/wiki/Leet>

http://simple.wikipedia.org/wiki/Leet#Wrong_grammar

<http://1337.me/>

<http://www.robertecker.com/hp/research/leet-converter.php?lang=en>