

Project #4  
CpSc 8270: Language Translation  
Computer Science Division, Clemson University  
**Introduction to an Interpreter for Python 2.7.2**  
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## Due Date:

In order to receive credit for this assignment, your project must be submitted, using the `web handin` command, by 8 AM, Thursday, October 27<sup>th</sup> of 2016. If you are unable to complete the project by the first due date, you may submit the project within three days after the due date with a ten point deduction.

## Project Specification:

The Python web site provides the source for all versions of Python and, for this project, you will be using a version of the grammar for Python 2.7.2 that has been converted from EBNF to a format compatible with the bison parser generator. The bison parsable grammar, a scanner, main program, and Makefile are provided for your use in a directory in your repo:

`8270Assets-2016/projects/4/`

Your tasks include:

1. Insert semantic actions into the parser to evaluate expressions of the form `print <expr>`, where `<expr>` is an expression involving integers and operators as follows: `{x + y, x - y, x * y, x/y, x%y, x**e, (x), -x, +x}`.
2. All expressions should evaluate to the result that you would obtain if you used the Python interpreter.
3. In the directory that contains your working interpreter, place a new directory titled `cases` that contains test cases that adequately test your interpreter.
4. Write a test harness, `test.py`, and place it in your project folder so that it runs the test cases in `cases`.

Compress your project directory and submit your project in the usual manner. Your project directory should be organized as follows:

