



University of Maryland University College

CMSC 430 - Theory of Language Translation Programming Project 4

The fourth project involves writing an interpreter that will execute the program compiled by the first three projects. Execution of the program entails evaluating the expression that is defined by the program. Like project 3, the grammar is restricted to exclude multiple functions and any function calls.

You are not required to do any semantic error checking in this project, although you may build on what you developed in project 3 if you wish. You may convert all values to double values, although you can maintain their individual types if you wish.

The amount of points that you will receive for the functionality portion of your grade on this project will be based on the ability of your interpreter to properly execute each of the following test cases:

Expression with arithmetic operators	20 points
Expression with relational and logical operators	20 points
Conditional expression with relational and logical operators	10 points
Function with variables	10 points
Function with parameters	10 points

To maximize the amount of points you will receive, it is recommend that you begin will the simplest type of programs and progressively add each new feature so that you are certain you can submit a version that works correctly on a subset of the above types of programs.