The Mini-Pascal Compiler Project for CSCI 3313

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The purpose of this project is to write a mini-pascal compiler by the tools Flex and Bison. Finally, we need to create four files: project.y, project.l, project.c and project.h. The project.y uses Bison to specify the grammar for the compiler which is the given mini-pascal grammar. The project.l uses Flex to specify the lexical token for the mini-pascal language. The project.h has the data type and declaration of functions. The project.c has the definitions of functions that are called in the project.y file.

There are totally 6 weeks for this project. We will have 6 project homework and we will call them project part 1 to project part 6. Each of the project homework will be posted at Monday and due the same week Sunday midnight. There is another 24 hours' extension with 40% penalty, which means if you submit your project homework after Sunday midnight and before next Monday midnight, your score will multiply with 0.6. After 24 hours' extension, your submission doesn't have any score.

There are four templates files on Blackboard. Use them to start your own project.

Week 1: explain the templates code, the explicit way to specify precedence in Bison; write rules in Flex and Bison with simplified meaningful action. The TA should show the example of rule design.

Your work: Finish the Flex file and Bison rules strictly under the mini-pascal grammar (This file is very important and please refer to it when you do your project). In the Flex file, anything been read, just return some token and in the Bison part uses some prints to show the grammar has been triggered. For the precedence part, use the explicit way to declare them.

Due: Oct 16th, midnight. Submit only your Flex and Bison files.

Week 2:

Week 3:

Week 4:

Week 5:

Week 6: