Lab Work 5 Due Date: May 09, 2025 (EoD) Groups of 2.

| Task 1: Add support to | the gramm | nar for the follo | wing |
|--------------------------|--------------|-------------------|------|
| % and ^ Already complete | d (mod and p | ower) | |
| Unary minus and plus | F → -F | F → +F | |

Task 2: Add support to the grammar for the following

if (one or more conditions)

The condition should resolve to > 0 as TRUE and <=0 as FALSE

Implement it as a complete conditional if structure

Provide support for: (condition) || (condition) && (condition) any possible combination

Consider the condition to be any arithmetic expression

| has same precedence as ADD and MINUS

&& has same precedence as MILTI and DIV

Provide support for < > <= >= operators

Provide support for Negation (arithmetic operator) and Not (logical) in the conditions

Task 3: Add support to the grammar for the following

 $\{ \ \ \ \ \}$ in addition to the current () in the grammar.

Submit a single zip file with the name as: ID1-ID2.zip

Place your .I .y and make files at the root.

Your compiled parser should be a file names: work5

i.e. I should be able to do the following:

make

./work5 inputfile.txt

You do not need to provide inputfile.txt. Hardcode its name in the main function.