## GRAFI315

## Project Part II Report

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The project was difficult for us at the beginning. Because we weren't familiar with yacc or lex we could not manage to combine each other. The first problem during combining was there were two main method one for yacc and one for lex. But this problem was easily solved because terminal told us there were two main methods. The other problem was we wrote lexer as just a modifier by using printf() statement in the first part of the project. While we were tring to run the yacc code we only saw what lexer were doing the same thing with project part I. We overcome this situation with changing all printf() statements to return except the tokens for newline comment and space. These two tokens just stayed as tokens without doing anything.

Of course the code did not work at the beginning and it gave us a error. This was the most frustiating part for us because when we use yacc command in the terminal it does not tell us where the error was and we had to read our codes several times again and again. Then we find that if we compile yacc with -v we would get a output.y file where all the stages were shown. Even though the file was complicating for us to read we finally managed to solve the problem and we first saw our code was working well. After that we tried to add errors but since we didnot know how to give error we made a small research on the internet then we understood giving error is the easist part of the project.

The BNF grammar of the query language was also challenging we wrote the graph language with ease but we needed to write the code for query carefully in order to protect LL(1) grammar. Also we forgot the take care of the newlines in query for some reason even though we did it for graph part of the project. We find this by making yacc code to give error on every rule and creating a new test file with only one line then we understand why we were getting syntax error because when we used one line sample the parser worked great.