**How to run the code:**

1. We have 2 input files
2. **pa3-cky/grammar\_rules.txt**

The grammar rules file has all the grammar rules as required. If you want to add more grammar rules, you can add new rules in next lines, with each term of the rule separated by a single ‘ ’ space character.

The program is generic enough, to handle new grammar rules, given grammar rules are formatted correctly and can be parsed by the program.

1. **pa3-cky/sents.txt**

The sents.txt file, contains all the input sentences. If you want to add new sentences or replace original, you can go ahead and put all the sentences in this file.

The program will read sentences from this file alone.

1. I have two python main code files.
2. **pa3-cky/sents.txt pa3-cky/parser/GrammarParser.py**

Grammar parser file has a class named GrammarParser, which is equipped with file I/O and parse features, and can extract relevant grammar rules and also the sentences from the input file.

1. **pa3-cky/parser/CKYAlgo.py**

CKYAlgo file, has a class named CKYAlgo, which uses GrammarParser class to parse the input file and run CKY Algorithm on it.

It also prints the results in the specified format on the terminal

To run simply type the following command. It will take all the input files by default.

*python CKYAlgo.py*