Writing CFG rules

[Instruction]

1. Provide **A SET OF RULES** to parse all the 5 sentences.
2. In case you are not able to provide a set, then do the followings.
   - ✧ Write **5 sets** of rules, each of which parses a corresponding sentence

- ➢ The rules should be in the **CFG** format.
  - ✧ The format can be replaced with **CNF**.
- ➢ The non-terminal symbols can be used with a choice of your own, but they still have to be linguistically meaningful to others.
- ➢ A lexicon has to be defined.
- ➢ The rules should be able to describe **ALL** and **ONLY** grammatical sentences.

[Sentences to be analyzed]

1. *Many people gathered to see the famous concert.*
2. *The outdoor concert will be canceled if it rains.*
3. *The shop manager wrote an email to the customer.*
4. *When he finished cooking, his wife and her sister returned home.*
5. *Which option do you want to select?*

[What to submit?]

1. **Grammar Files**
   - ➢ A file including a set of CFG rules to parse all the sentences
   - ➢ If you have written separate rules for the sentences,
     - ✓ 5 Files, each of which includes a set of rules to parse a corresponding sentence.
2. **Files Containing Output Trees**
   - ➢ A file or files including all the parse trees produced by the set of rules to describe all the 5 sentences

- ✚ What to include in the files and how to name them?
  - ➢ **Grammar files**
    - ✧ **grammar_yourname.cfg**: if you have a set of rules for the five sentences OR

- ✧ **grammar1_yourname.cfg**, **grammar2_yourname.cfg**, etc., representing each sentence
  - ✓ if you have a set of grammar per each sentence
- ➢ **Output files**
  - ✧ **result1_yourname.txt**, **result2_yourname.txt**, etc., representing each sentence
    - ✓ Each file should contain the output of each sentence.
- ➢ A file containing **the captures of the trees** for the five sentences
  - ✧ Just submit **top three trees** for each sentence if there are more than three trees.
  - ✧ **Specify how many trees are derived for each sentence**
    - ✓ e.g., sentence1: 5 trees