TUTORIAL 8

**Thapar Institute of Engineering and Technology Patiala**

**Computer Science and Engineering Department (CSED)**

1. Using Pumping lemma prove that  is not context-free.

2. Given the following grammar



Apply CYK algorithm to check whether w = babba belongs to this language or not?.

3. Design a Turing machine for the language consisting of unequal number of a’s and b’s over.

4. Design a Turing Machine for the language .