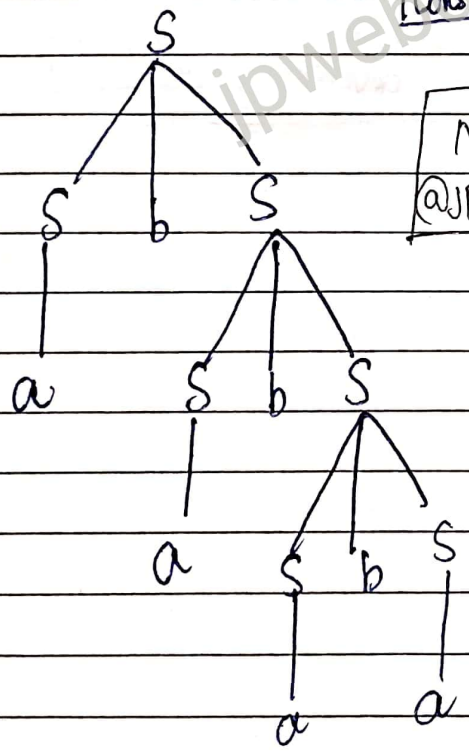


* Ambiguity in Grammar & Language:-

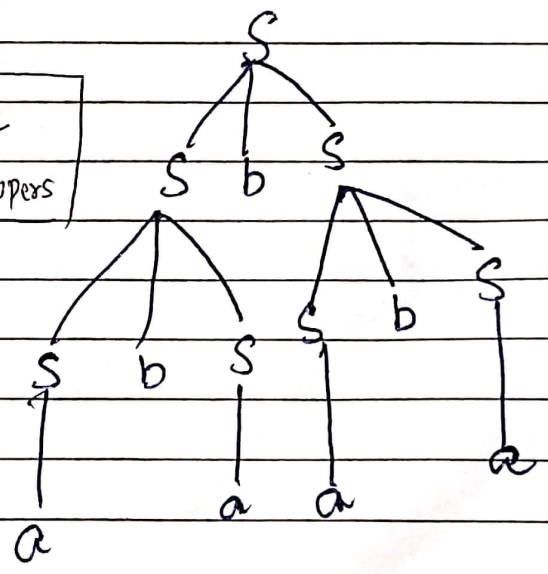
- If there exists more than one left most derivation or more than one right most derivation for a string which is generated by grammar is called ambiguous grammar.
- If L is context free language (CFL) for which there exists an unambiguous grammar, then L is said to be unambiguous.

for Example:- If G is the grammar $S \rightarrow sbS/a$, show that G is ambiguous.

Consider $w = ababab$



Notes by @jpwebdevelopers



→ If every grammar that generates L is ambiguous then the language is called inherently ambiguous grammar.

Imp. Points

- If a CFG is ambiguous, language generated by grammar may or may not be ambiguous.
- There is no algorithm to convert an ambiguous CFG to an unambiguous CFG. @JPwebdevelopers.
- There always exists an unambiguous CFG corresponding to an unambiguous CFL.
- Deterministic CFL are always unambiguous.

