Topics for presentation on First come first served basis

(Maximum number of students = 2 per topic)

1. Introduction to Automation. Model of Automation.
2. DFA
3. NFA
4. NFA to DFA conversion.
5. Writing and designing diagram) of regular expression.
6. Operations on language.
7. Properties of regular languages (Union).
8. Properties of regular languages (Intersection).
9. Properties of regular languages (Complement).
10. Properties of regular languages (Difference).
11. Properties of regular languages (Reversal).
12. Properties of regular languages (Closure).
13. Properties of regular languages (Concatenation).
14. Properties of CFL (Union)
15. Properties of CFL(Intersection)
16. Properties of CFL( Kleene star)
17. Properties of CFL ( Concatenation)
18. Grammar with example.
19. Derivation tree with example.
20. Leftmost Derivation.
21. Rightmost derivation.
22. Ambiguous tree.
23. Type 3 grammar.
24. Type 2 grammar.
25. Type 1 grammar.
26. Chomsky normal form with example
27. PDA (Def, model)
28. PDA, L= { an bn | n>0}
29. PDA, L= WcWr | W ϵ {0,1} c is a terminal}
30. PDA, L= an b4n.
31. PDA, L=an b5n.
32. Turing Machine (def, model)
33. Right and Left movement of Turing machine.
34. Pumping lemma with example.