Theory of Computation (TOC)
Programming Practice Exercises
Set-1
For **Section-B**, 3rd Semester B.Tech. IT

Instructor: Prof. Anupam   Date -31.08.2019

Instructions:

1. Submit code/programming solution of any four programs from the following based on your preference. A bonus weightage will be credited if students submitted more than four programs.
2. Individual groups have to submit the solution in the form of hardcopy (Pseudocode/Algorithm, inputs, outputs) as well as softcopy (Code in your preferred language).
3. This will be evaluated after completion of C1 Formative assessments.

    NOTE: - We will assume each member of the group has a clear concept about the submitted code of the programs.

1. Write a computer program to simulate Nondeterministic Finite Automata (NFA).
2. Write a computer program to simulate Deterministic Finite Automata (DFA).
3. Write a computer program to construct DFA from NFA.
4. Write a computer program that produces a minimal DFA for any given DFA.
5. Write a computer program which reads the rules of Regular Grammar from a file and determines whether a given string is acceptable by the Regular grammar.
6. Write a computer program which reads the rules of given Grammar from a file and determines whether a given grammar is Regular or not.