

Tutorial 7

- 1) Give a logic specification for a program that reads a sequence of $n+1$ values and checks whether the first value also appears in the next input n values.
- 2) Give a logic specification for a program that first reads two words (i.e. two sequences of alphabetic characters, separated by a blank and terminated by '#'). The second word may be null; the first must not. Then, the program reads a sequence of other words, separated by blanks and terminated by '#', and rewrites the sequence, substituting all occurrences of the first word by the second.
- 3) Mention advantages and disadvantages of using FSM specification for systems.
- 4) Write Algebraic Specifications for Stack operations.
- 5) Compare or Differentiate Petri Nets with FSM.

NOTE: Submit your answers in a single pdf. The filename of the pdf must be your roll number. Draw block diagrams whenever required.