**Totorial (Turing Machine)**

1. Design a Turing Machine which will take a binary number n as input and outputs the ones complement of   2\*n
2. Construct a Turing Machine that accepts all binary strings which start and end with the same symbol and have the same number of zeros as ones.
3. Construct a Turing Machine that accepts all strings over Σ = {a,b,c} where *Na(w) = Nb(w) + Nc(w)*
4. Design a Turing Machine which will take a binary number as input and outputs its two’s complement.
5. Construct a Turing Machine that accepts all strings over Σ = {a,b} where Na(w) = 2 \*Nb(w)
6. Design a Turing machine that accepts the language of strings consisting of an equal number of 0s and 1s.
7. Design a Turing machine that accepts the language of balanced parentheses (e.g., (()())).