## Theory of Computer Science Tutorial V

- 1) Design Turing Machine that recognize the language L= {  $x \mid n_a(x)=n_b(x)$  }  $\Sigma = \{a,b\}$
- 2) Design a Turing Machine for recognition of binary Palindrome.
- 3) Design a Turing Machine for well formedness of parenthesis.  $\Sigma = \{(,[,],)\}$
- 4) Design a Turing Machine for n<sup>2</sup> where n is an integer and n>=0.
- 5) Design a Turing Machine that computes remainder and quotient when a unary number is divided by another unary number.