MCSE503P – Computer Architecture and Organization Lab (L53+L54)

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Lab Exercise No: 01

(1) (a) Study about computer system organization and architecture:

Discuss about functional components, types, generations and working aspects with respect to CISC and RISC architecture

(b) Study and implement the following using logisim simulator: (logic diagram / truth table / Boolean expression)

Basic and universal gates

De Morgan's theorem, associative law and distributive law

Adder and subtractor circuit

Boolean expression implementation as follows,

F1 = AB + CD

F2 = A'BC + C'B +ABC

F3 = AB' + BC' + CA'