**Theory of Computation (10672116)**

**Exercise Sheet**

**Week 5**

Exercises for this week

* Consider the set of strings on {0,1}, construct a DFA for each of the following:
  + A DFA that accepts all strings where every 00 is followed immediately by a 1. For example, the strings 101, 0010, 0010011001 are in the language, but 0001 and 00100 are not.
  + A DFA that accepts all strings in which the leftmost two symbols and the rightmost two symbols are identical.
  + A DFA that accepts all strings with at least one 1 and exactly two 0’s