Algorithms and Problem Solving (15B11CI411)
Tutorial – 13
Week 13 (23-28 April, 2018)
(Strings)

Q1. Show the comparisons the naive string matcher makes for the pattern P=0001 in the text T=000010001010001.

Q2. How many spurious hits does the Rabin-Karp matcher encounter in the text T=3141592653589793 when looking for the pattern P=26 and modulo q =11?

Q3. Construct the string-matching automaton for the pattern P=aabab and illustrate its operation on the text string T = aaababaabaababaab.

Q4.Draw a state-transition diagram for a string-matching automaton for the pattern ababbabbababbababbabb over the alphabet Σ={a,b}.

Q5. Compute the prefix function Π for the pattern ababbabbabbababbabb.