

Lab Assignment 08

Implement and analyze the comparative time complexity of the following String Matching Algorithms:

- 1) Naive String Matching Algorithm
- 2) Knuth-Morris-Pratt Algorithm
- 3) Robin-Karp Algorithm
- 4) String matching with Finite automata

Form each of the implemented algorithm display value of the following relevant feasible parameters: the valid and invalid shifts, spurious hit, Prefix Function, transition function and any other relevant parameters related to the respective algorithm.

Create the program profile and analyze the running time of each implemented algorithms. Compile your code for doing the performance evaluation by using gprof.