

Compiler Lab 2018

Assignment 2

Date: 18.01.2018

1. Write a program to convert a NFA with ϵ move to equivalent DFA.

Hints:

Follow the steps:

- i) Input the number of states and take those as input.
- ii) Input the number of I/P and take those as input.(With ϵ)
- iii) For $i=1$ to number of states
 For $j=1$ to number of input+1
 Input $\delta(\text{State}_i, I/P_j) \rightarrow \text{State}_k$
- iv) Construct ϵ -closure of each state.
- v) Mark ϵ -closure(Initial state) as new Initial state.
- vi) For $i=1$ to Number of I/P
 Construct transitional function
- vii) Follow step (Vi) while no new state appear.

2. Write a program to convert a RE directly to equivalent DFA.