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CS7B

Roll No: 51Expt No : 4

Aim: Write a program to minimize DFA.

Algorithm:

1. Start
2. Aupt no. of alphabets, no. of states, alphabets, no. of transitions, start state and final state.
3. ~~Initial~~ Aupt each transition in form of start-state, alphabet, next-state and add to transition map.
4. Construct a table so that every pair of state gets a zero element.
5. Divide the states into final and non final states.
6. Mark table $[i][j] = 1$ for every $i \in \text{final}$ and $j \in \text{non final states}$ or vice versa.
7. If table $[i][j] = 0$ such that table $[s(i,x), s(j,x)] = 1$, then table $[i][j] = 1$, where 'x' is an alphabet.
8. Repeat the above step until no more markings can be made.
9. Combine all states where table $[i][i] = 0$ and print them.
10. Stop.

Result:

Thus the program is implemented successfully.