COMPILER DESIGN WEEK 1 ASSIGNMENT

Problem:

Implementation of Language recognizer for set of all strings ending with two symbols of same type

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CSE-F

**Description:**

DFA **0**

**0**

**0**

0 1 0

**1**

**1**

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**1**

The acceptable strings of the language are aa ,bb, abb,baa ,aaa ,bbb ,abaa ,babb ,bbaa ,aabb ,aaaa, bbbb ………

Deterministic Finite Automata for the given language

1. M= (Q, ∑, δ, Q0, F) where
2. Q=Set of states = {Q0, Q1, Q2, Q3, Q4}
3. ∑=Input Alphabet = {0,1}
4. Q0 is start state and
5. F= {Q1, Q2} is the set of accepting states.

|  |  |
| --- | --- |
| **Input** | **Expected output** |
| aa | String accepted |
| abaa | String accepted |
| aab | String not accepted |
| aaaaaaa | String accepted |
| abr | Invalid token |
| ababab | String not accepted |

**Test Cases:**

**Outputs of the program when compiled:**











