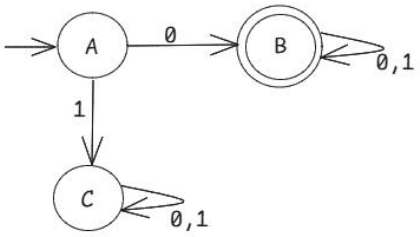
DFA

L1 = Set of all strings that start with '0'

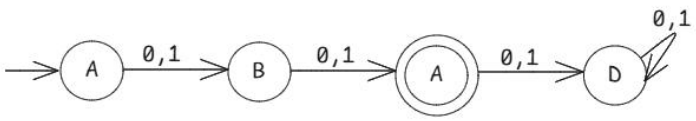
= {0, 00, 000, 01, 010, 001, ...}



Construct a DFA that accepts sets of all strings over {0,1} of length 2.

Σ = {0, 1}

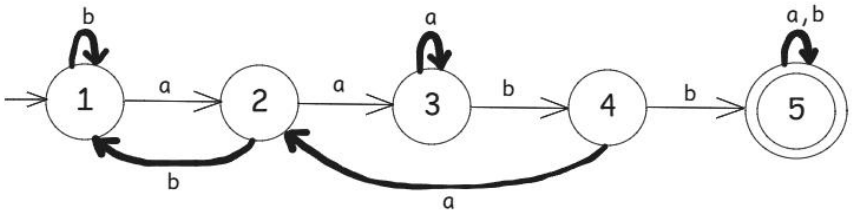
L = {00, 01, 11, 10}



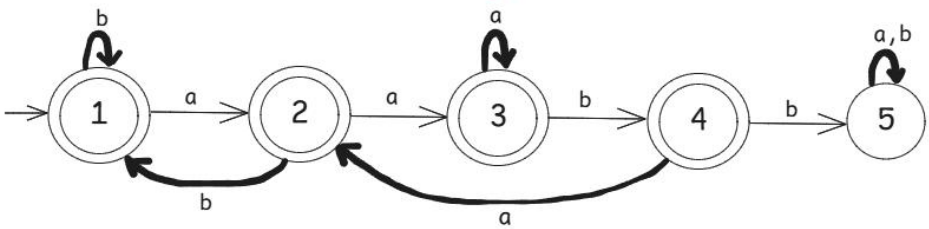
Construct a DFA that accepts any strings over {a,b} that does not contain the string aabb in it.

Simplify

Let us construct a DFA that accepts all strings over {a,b} that contains the string aabb in it



Flip it -> All non-final states become final states
All final states become non-final states

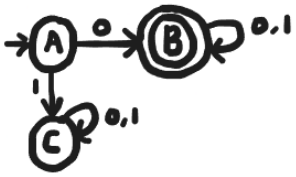


- **For each of the following languages, describe a DFA accepting the language by drawing a DFA diagram**
  - L1 = set of all strings over {0,1} that starts with 0
  - L2 = set of all strings over {0,1} of length 2

1.

$\Sigma = \{0, 1\}$

START WITH 0



2.

$\Sigma = \{0, 1\}$

$L = \{00, 01, 11, 10\}$