RGPV 2015

Q. Design DFA accepting the following languages over the alphabet {0, 1}

1. The set of all words ending in 00.

1. The set of all words except ε.

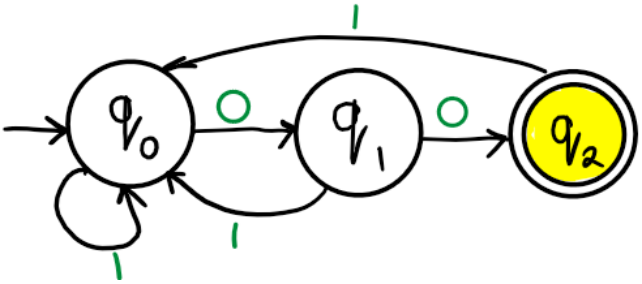
1. The set of all words that begin with 0.

Ans.

1. The set of all words ending with 00:

Some example strings = {00, 100, 000, 1000,0100,11100}

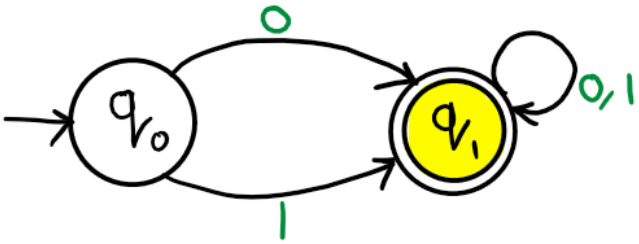
Regular expression = (0+1)*00



2. The set of all words except ε:

Some example strings = {0, 1, 00, 10, 01, 11, 000000, 11111}

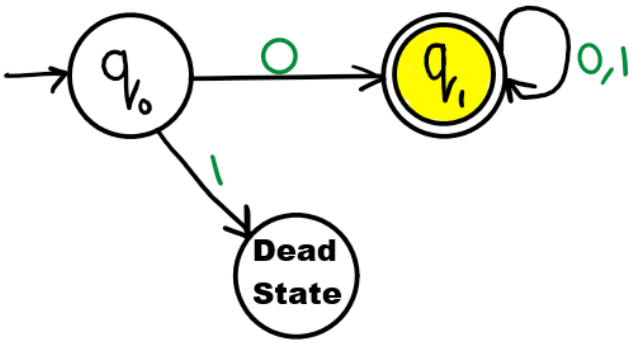
Regular expression = (0+1)(0+1)*



3. The set of all words that begin with 0:

Some example strings = {0, 01, 00000, 0101010101}

Regular expression = 0(0+1)*



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