

Give DFA's accepting the languages over the alphabet  $\{0, 1\}$  (notice : give diagram notation of DFA)

1. The set of all strings with exactly one 0.
2. The set of strings that either begin or end with 01.
3. The set of all strings with at least one 0 and exactly two 1's.
4. The set of strings such that the number of 0's is divisible by three, and the number of 1's is divisible by two.
5. The set of all strings such that each block of three consecutive symbols contains at least two 0's.