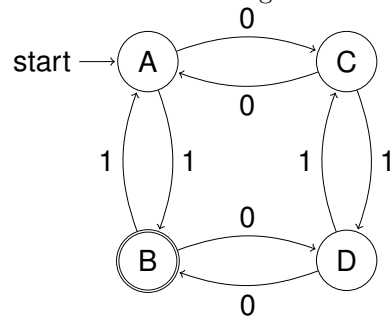1. **Problem**

   Consider the following automaton with initial state A and accepting state B:

   Which of the following sequences are accepted?

   (a) 1010011

   (b) 01011

   (c) 00100

   (d) 1101

   (e) 111110

   Solution

   The given automaton accepts input strings which consist of an odd number of ones and even number of zeros.

   (a) Not accepted

   (b) Accepted

   (c) Accepted

   (d) Not accepted

   (e) Not accepted