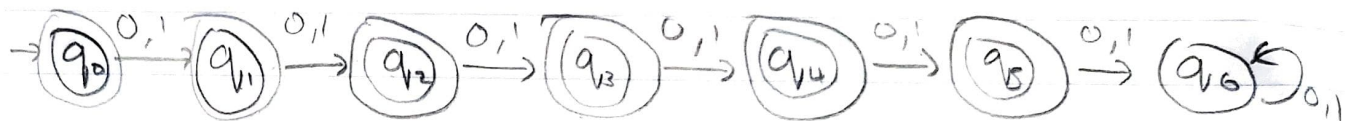
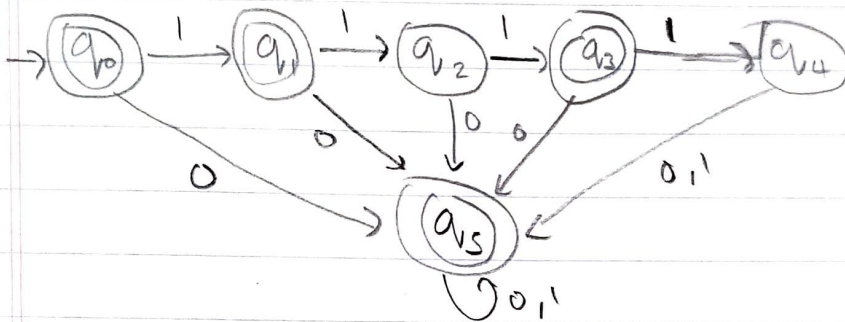


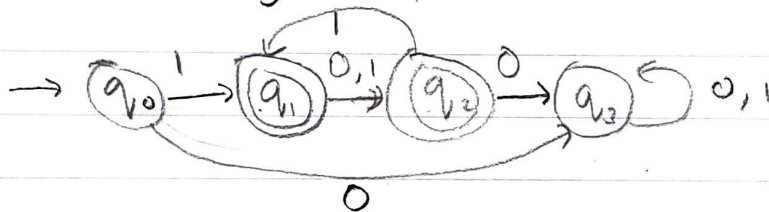
1. a) $L = \text{length of } w \text{ at most } 5$



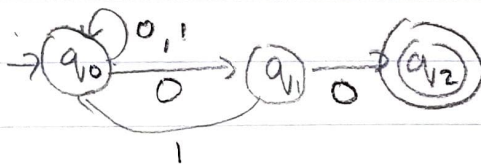
b) $L = w$ is any string except 11 and 1111



c) $L = \text{every odd position in } w \text{ is a } 1$



2. a) $L = w$ end with 00, three states



b) $L = w$ contains the substring 0101, five states

