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Q: 1:-

Ans:- Binary alphabet = $\{0, 1\}$

context free grammar for w where
the length of w is odd and the
middle is 0.

$w \rightarrow 0LO|OL1|1LO|1L1|O$

this language satisfies given
condition.

Q: 2:-

Binary alphabet = $\{0, 1\}$

w is a palindrome

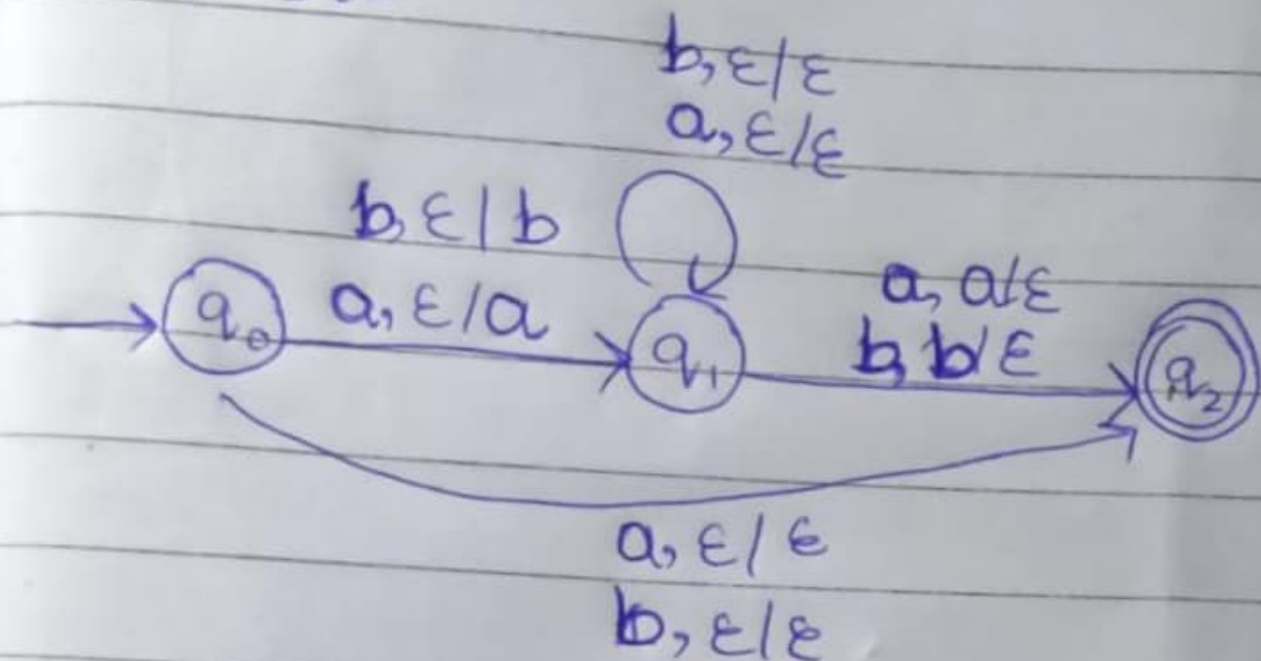
$SO \rightarrow 1SO1|OSOO|O|1|\epsilon$

this language satisfies given
condition.

Q: 2:-

Date: ___/___/20___

Ans:-



$$Q = \{q_0, q_1, q_2\}$$

$$\Sigma = \{a, b, \epsilon\}$$

$$q_0 = q_0$$

$$F = q_2$$

$$q_0 = q_0$$

$$F = q_2$$

Transition function = $Q \times T$