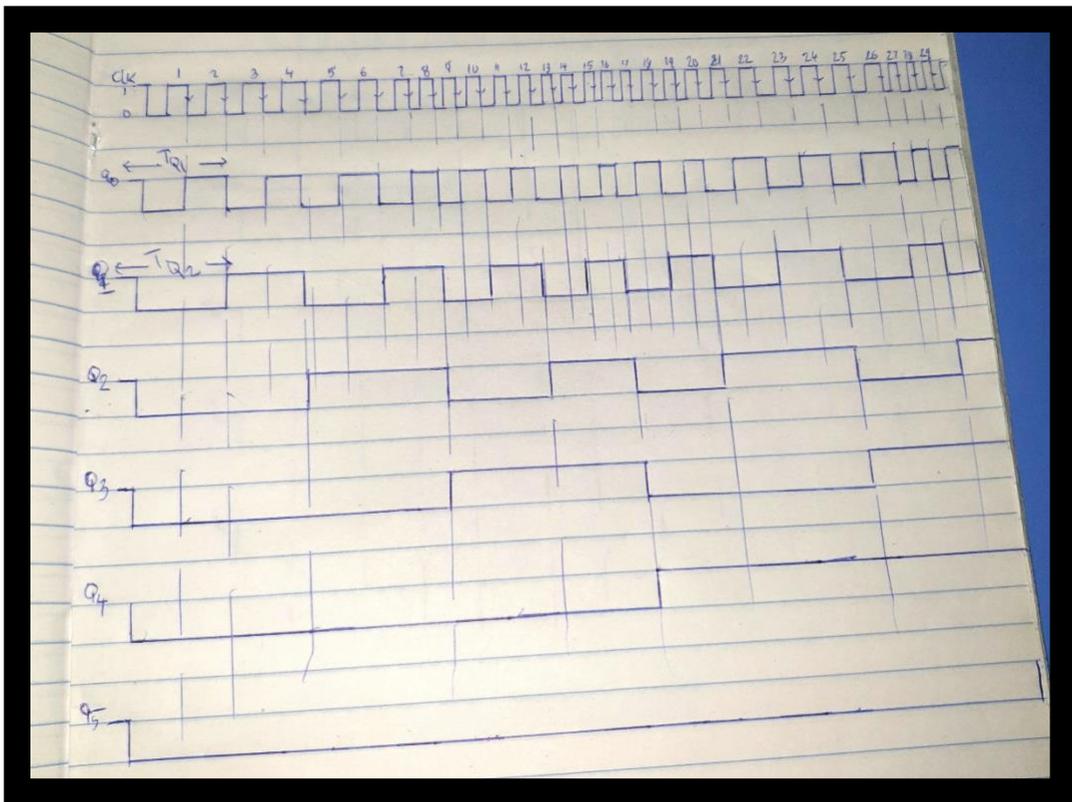


ASSIGNMENT 2

A counter with six FFs ($Q_0, Q_1, Q_2, Q_3, Q_4, Q_5$) will = 2^6 which will equal to = 64; There the Mod number of the Counter is MOD=16.

- a) The Frequency of Q_5 is exactly one-half of the frequency of Q_4 therefore frequency will be $1/64^{\text{th}}$ of 1Mhz



- b) The range counting states of the counter is ranging from Q_5-Q_0 (0 0 0 0 0 0 – 0 1 1 1 1 0) Q_5 = MSB, Q_0 = LSB.

c) After the starting count of "0 0 0 0 0 0", the 129th pulse will be "0 0 0 0 0 1".