DSM Tutorial Quiz

12/11/24

Today's Qns :-

Q1.

$0 \times 2F \longrightarrow 2 \times 16 + 15 \times 1 = 47$

$+ \quad 0 \times 3A \longrightarrow 3 \times 16 + 10 \times 1 = 58$

(Conv. to Dec.)

$0 \times 73 \longleftarrow 10\ 5$ (Conv. to Hex)

$16 \overline{)105} \rightarrow 7$, remainder 3

5, $16 \times 9 = 144$, $16 \times 7 = 102$

Ans: 0×73

Q2. Steps :-

i) Load operand A from memory to register

1 load operation → 2 cycles

ii) Load operand B from mem. to register

1 load operation → 2 cycles

iii) Perform addition in the ALU using operands A and B

1 arithmetic operation → 1 cycle

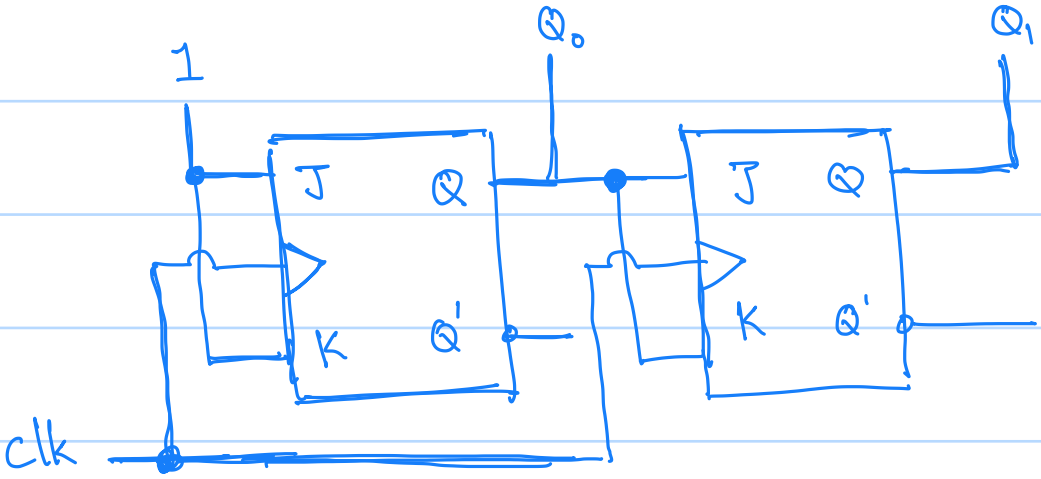
iv) Store the result in memory

1 store operation → 2 cycles

$\therefore$ Total no. of cycles = 2 + 2 + 1 + 2 = 7 cycles

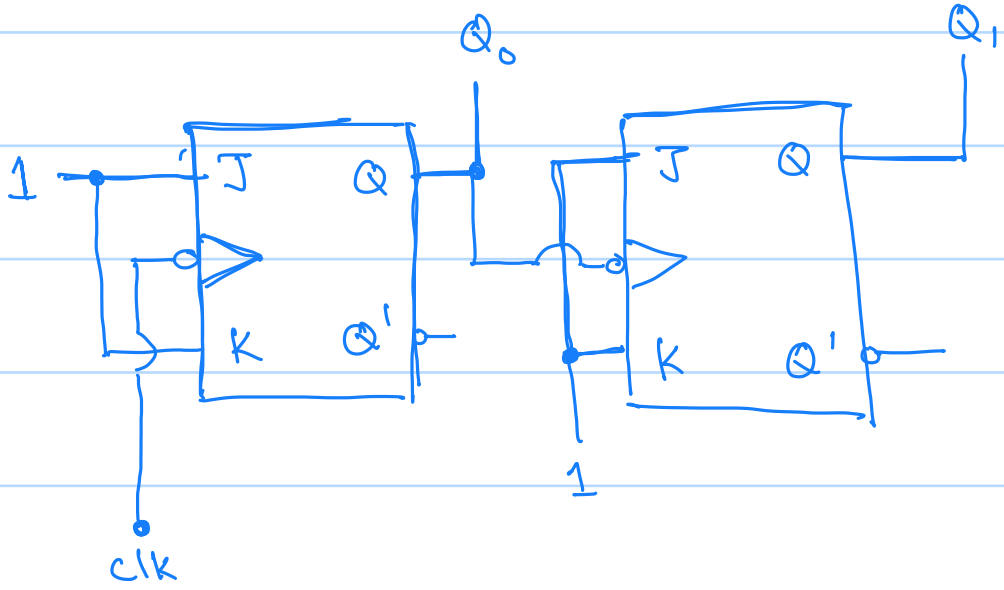
Previous Tut's Qns :-

Q1.



2-bit synchronous counter using JK-FF

Q2.



2-Bit Ripple Counter using JK-FF