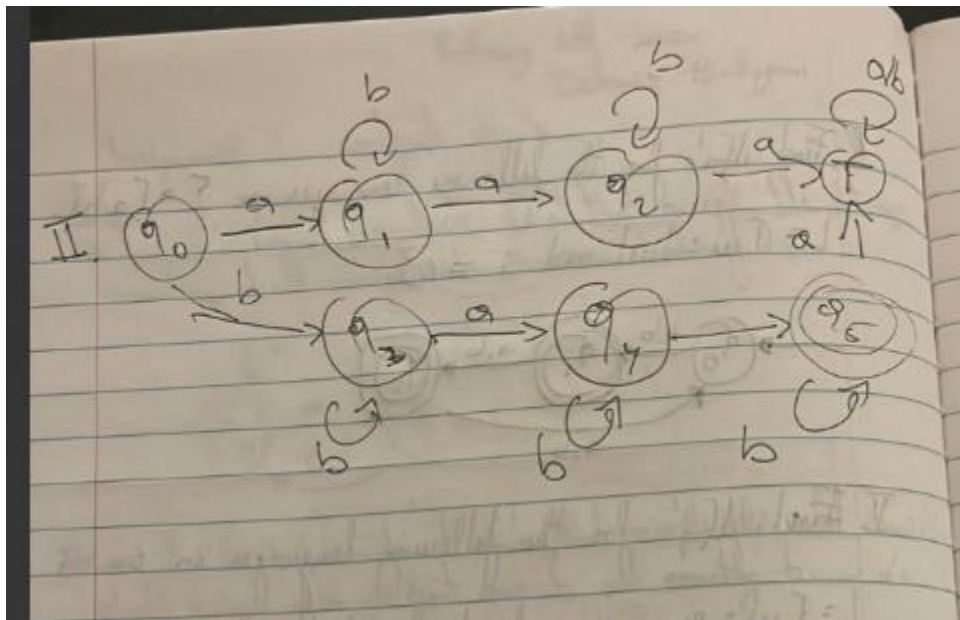
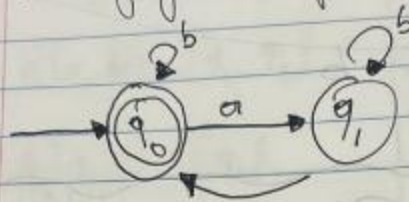


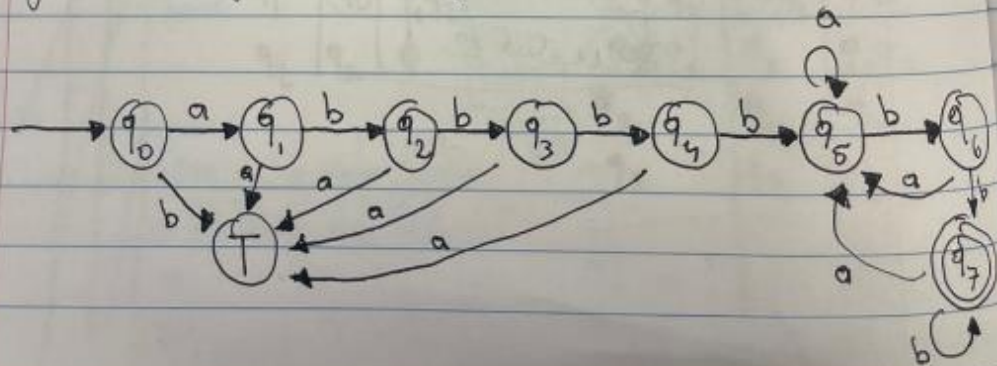
February 11th 2024  
Detroit - Michigan

## Assignment II: construct dfa's

I. For  $\Sigma = \{a, b\}$ , construct dfa's that accept the set consisting of all strings with an even number of a's.

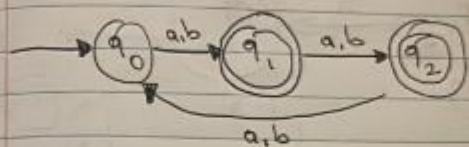


III Give DFA's for the languages  $L = \{ab^4wb^2 : w \in \{a,b\}^+\}$



IV. Find dfa's for the following languages on  $\Sigma = \{a, b\}$ .

$$L = \{w : |w| \bmod 3 \neq 0\}$$



V. Find dfa's for the following languages on  $\{a, b\}$ .

$L = \{w : \text{every run of } a\text{'s has length either two or three}\}$

