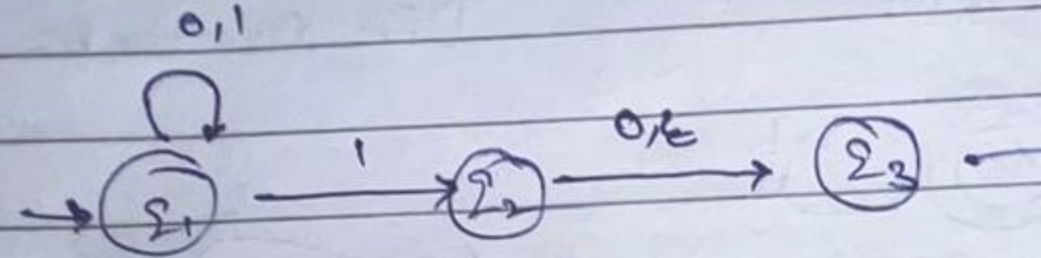
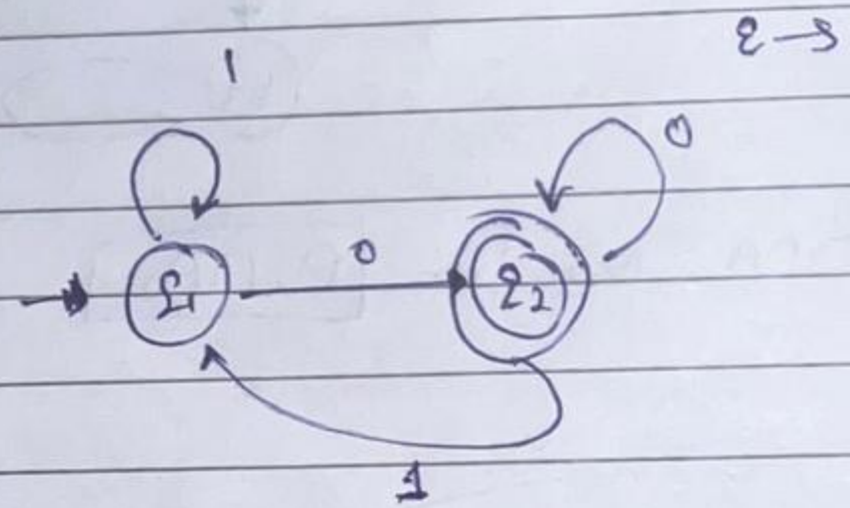
Lecture-4

Deterministic State is always

whatis Diff b/w DFA & NDF



NFA



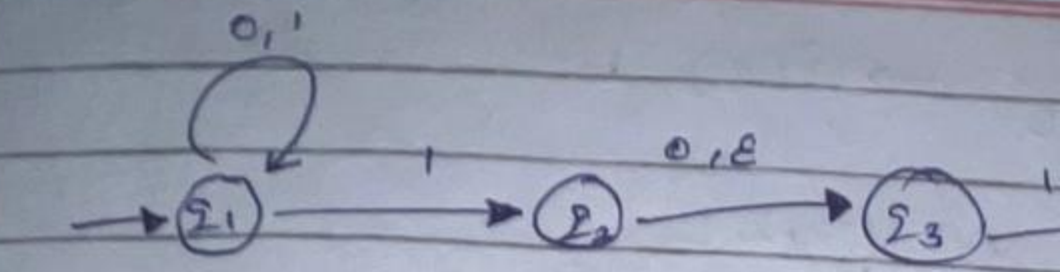
DFA

NFA →

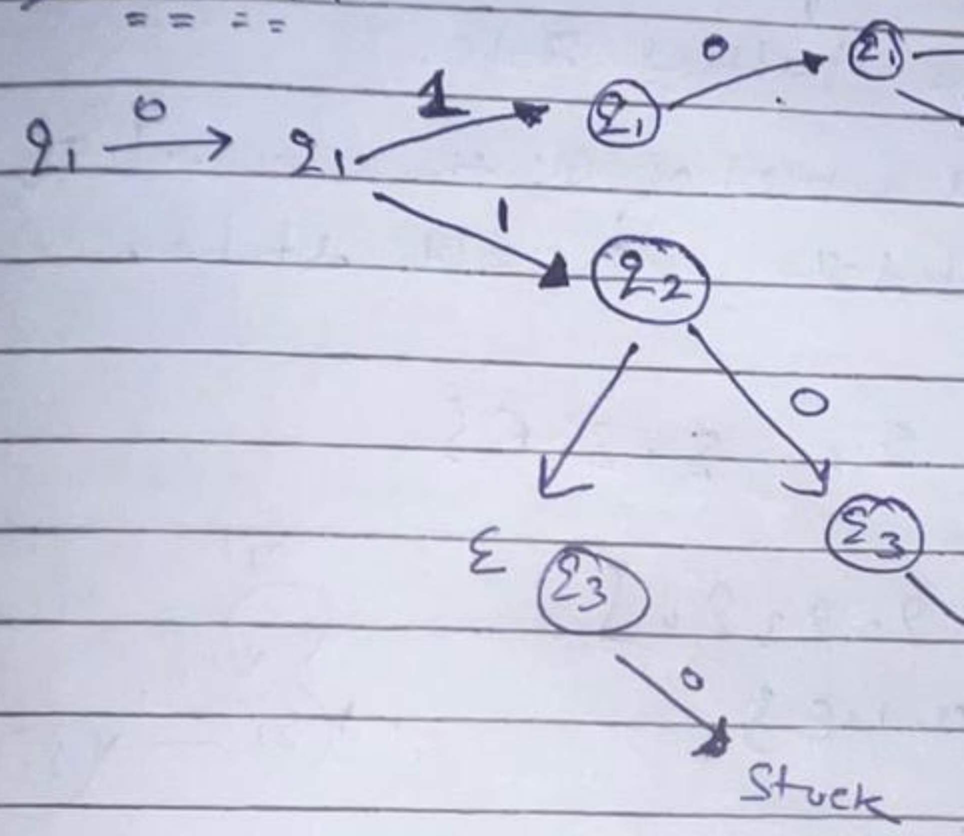
if the automaton is in st

from

ex2 input String is 010110



① → 010110



Computation Can accept that
input string we have 7 C
but ② of them are accepted

NFA : $N = \{Q, \Sigma_\varepsilon, \delta, q,$

$\delta : Q \times \Sigma_\varepsilon \rightarrow P(Q)$ is

$Q \rightarrow$ finite set of stat

$\Sigma_\varepsilon \rightarrow$ finite set of alphabet

$q \rightarrow$ is the initial stat

$F \rightarrow$ is a subset of Q;

called the acce

$N = \{Q, \Sigma_\varepsilon, \delta, q, F$

$Q = \{q_1 q_2 q_3 q_4\}$

$\Sigma_\varepsilon = \{0, 1, \varepsilon\}$

$q_1 \rightarrow q_1$

$F \rightarrow \{q_4\}$

	0	1	ε

(CSC 3106) Theory of

Lec 5# Equivalance of

By

Convert NFA to DFA.

- The key idea to convert
keep track of all possib
in simultaneously.

DFA M: $\{Q, \Sigma, \delta, q$

NFA N: $\{Q, \Sigma_\varepsilon, \delta,$

States : the set of stat

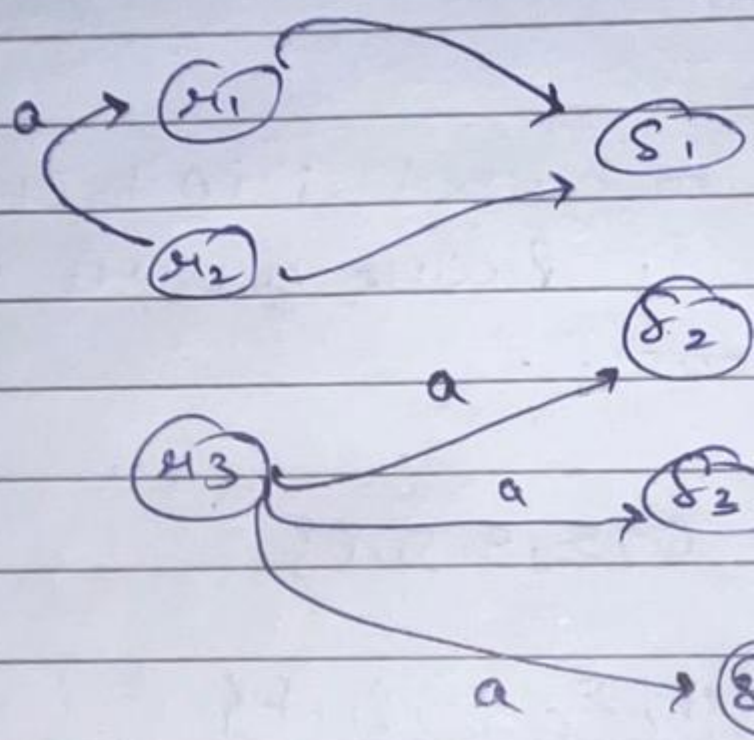
$0,1$

→ for $\in$ R of set of co

EASY CASE :-

No ε - Transition in

Ex $R = \{ r_1, r_2, r_3$



$\{ r_1, r_2, r_3 \} \xrightarrow{a} \{$

General Case