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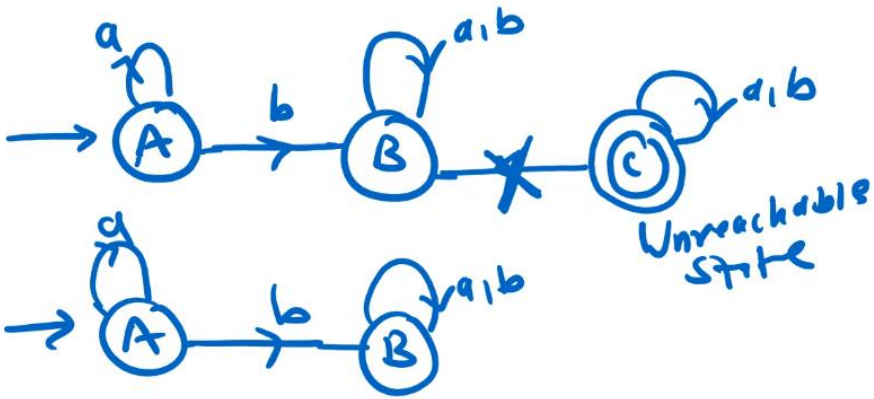
↳ If the resulting machine is free from any final state then it accepts empty language.



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Click the mic to turn it on.

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B114 LELLAPALLI VIKAS ...

B121 AJAY KANHERKAR ...

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B077 MAHAVIR SVNIT

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⇒ Finite or Infinite nell :⇒

↳ Select the state which cannot be reachable from the initial state & delete them.

1

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B077 MAHAVIR SVNIT

B114 LELLAPALLI VIKAS ...

B126 TANGUDU VIVEK S...

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Finite or Infinite nell :⇒

↳ Select the state which cannot be reachable from the initial state & delete them. → (Unreachable state)

↳ select those state from which we cannot reach to the final state and delete them. (Dead state)

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↳ Select the state which cannot be reachable from the initial state & delete them. → (Unreachable state)

↳ select those state from which we cannot reach to the Final state and delete them. (Dead state)

↳ If the resulting machine contains loops or cycles then the machine accepts the infinite language.

↳ If the resulting machine is free from cycles or loops then it accepts Finite language.

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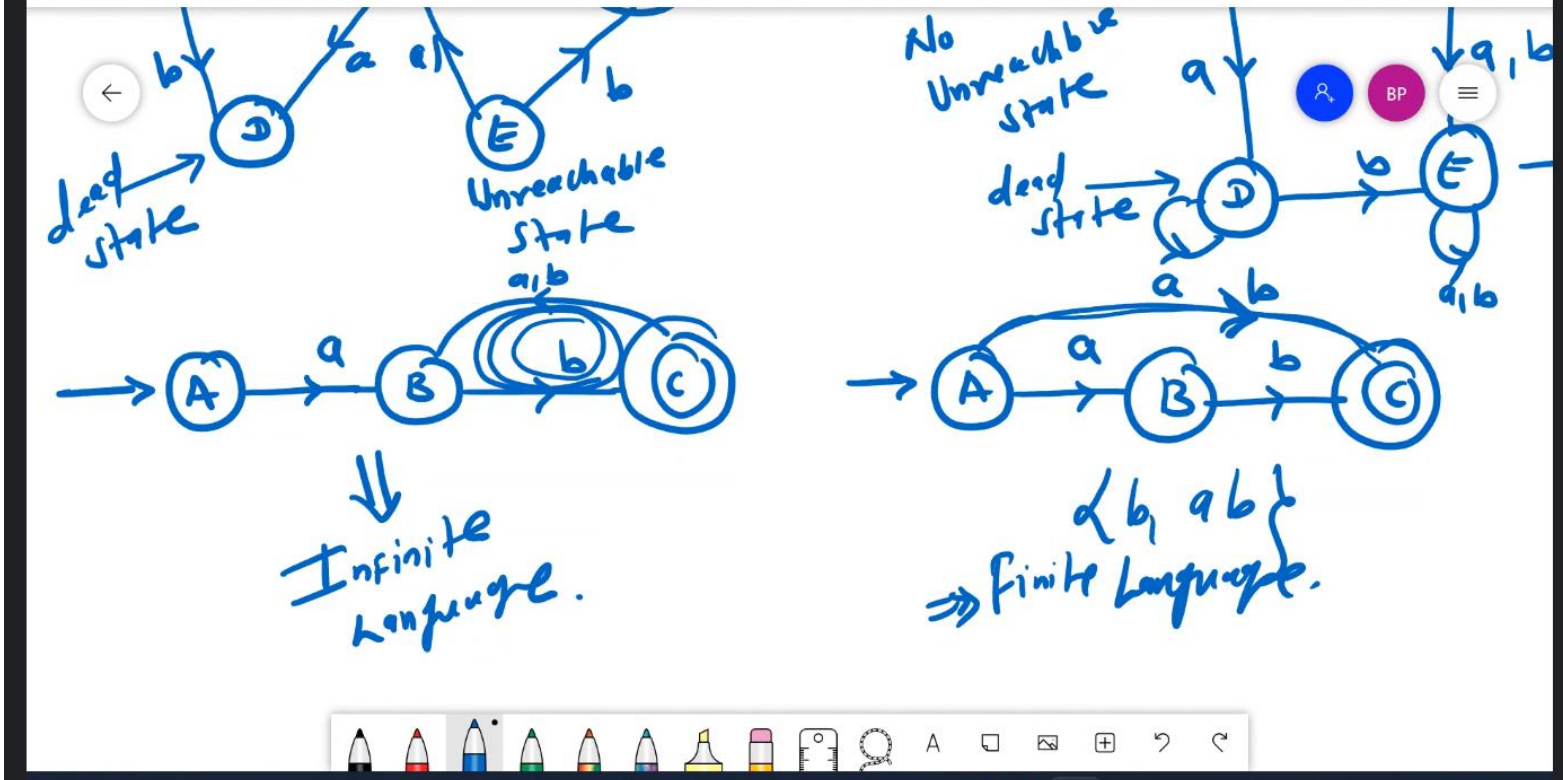

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Equivalence :⇒

Two finite state machines M_1 and M_2 are said to be equal if both of them are accept the same set of string.

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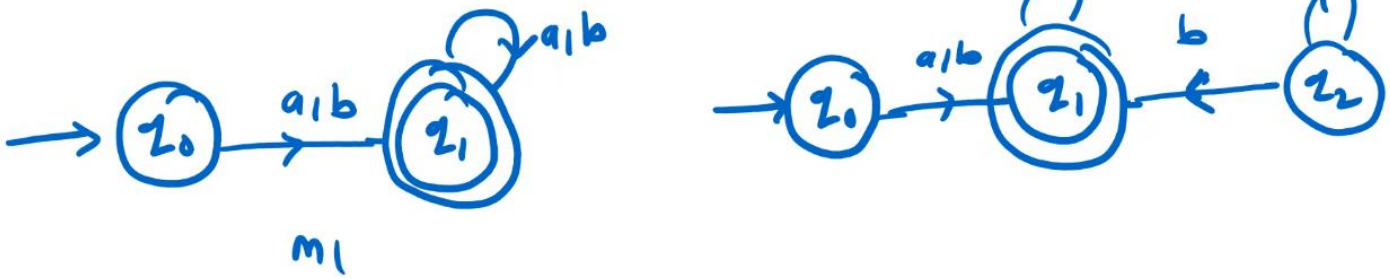
Two Finite state machines M_1 and M_2 [illegible]
said to be equal if both of them are accept[illegible]
same set of string.

$$M_1 = M_2 \iff L(M_1) = L(M_2)$$



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number of states.

→ Two machines M_1 and M_2 are said to be isomorphic to each other if one can be obtained from other by replacing the states.

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→ Two machines M_1 and M_2 are said to be Isomorphic to each other if one can be obtained from other by replacing the states.

→ The Isomorphic machine must be equal & the equal machine need not be isomorphic.

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⇒ Comparision Method is:

let M_1 and M_2 be two Finite state machine

→ Construct the transition table that have pair of states (q, q') $q \in M_1$ and $q' \in M_2$

→

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Pair of initial states.

If the table contains any pair of the [illegal] Final & Non Final or Non Final and Final then stop the construction of the table and declare that two machines are not equal.

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Final & NFinal ... NFinal and Final ...

the construction of the table and declare ... two machines are not equal.

→ Continue the process of construction of table for every new pair of the form F-f & NF-NF that appears on the input column and new terminate the process whenever no such type of pair appears in the input column.

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For every new pair of the form F-F or NF-NF that appears on the input column and now terminate the process whenever no such type of pair appears in the input column.

→ If the transition table contains all the pairs of the Final-Final, Nonfinal Nonfinal then the two machines are equal.

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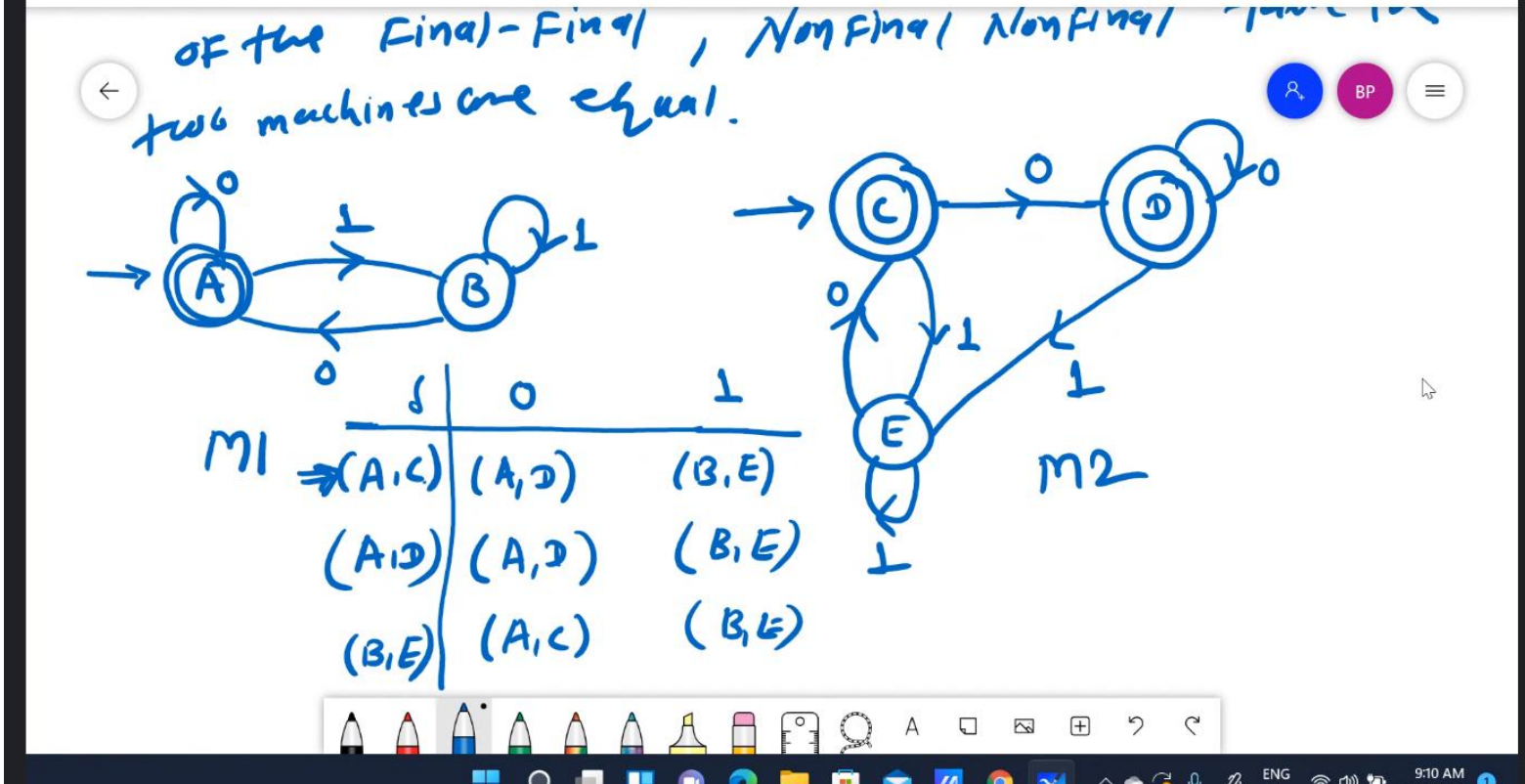

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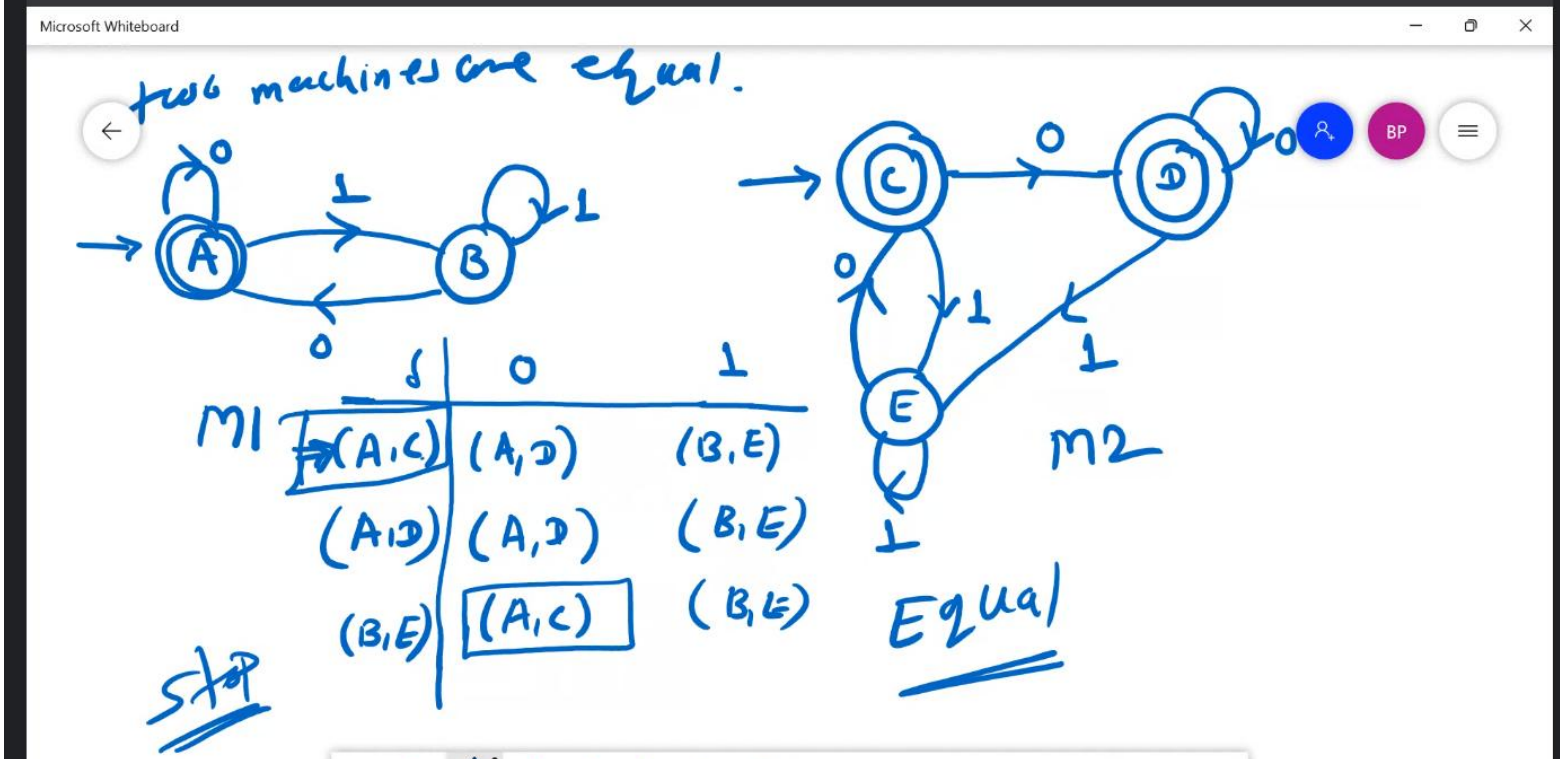

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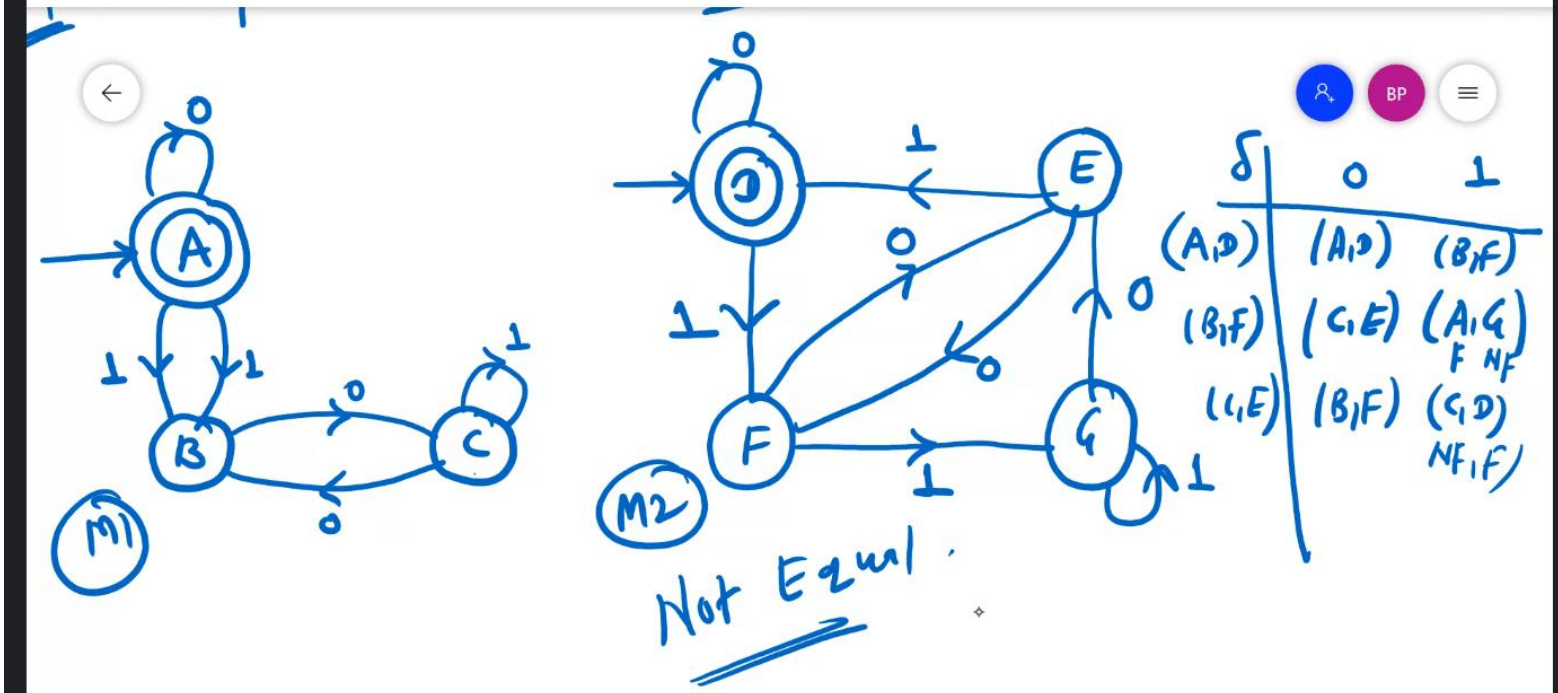

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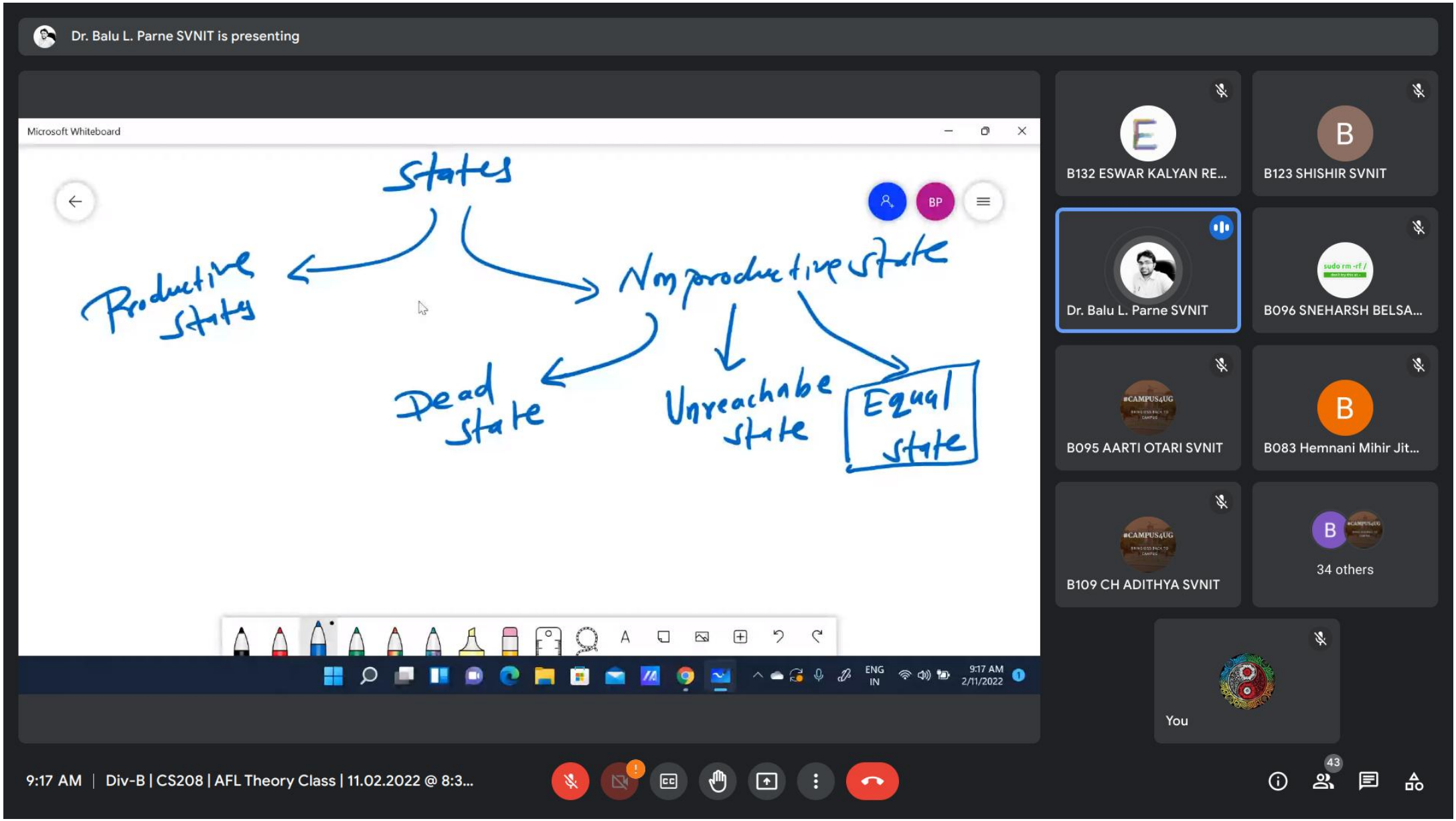
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States
Productive state
Non productive state
Dead state
Unreachabe state
Equal state
BP
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Unreach... state

Equal states !=>

Two states p, q are said to be equal if both $\delta(p,x)$ and $\delta(q,x)$ goes to Final or Non Final state.

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Equal States :=>

Two states P, q are said to be equal if both $\delta(P, n)$ and $\delta(q, n)$ goes to Final or Non Final state.

$\therefore P = q \iff \delta(P, n)$ & $\delta(q, n)$ F / NF

Eq

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Equal states are also called as ... states.

Unequal or Distinguishable states :⇒

Two states P, Q are said to be unequal or distinguishable if $\delta(P,n)$ goes to final and $\delta(Q,n)$ goes to non-final or viceversa.

$$P \neq Q \iff \delta(P,n) \; \& \; \delta(Q,n)$$

$\delta(P,n)$ → NF, $\delta(Q,n)$ → F

$\delta(P,n)$ → F, $\delta(Q,n)$ → NF

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