**Activity Four Questions**

1. Define Finite State Machine

* A machine that can be in only one state in a finite within finite number of states at any given time

1. Give two examples of finite state machine
   1. Explain each example with state transition diagram
2. Traffic Light

Initial State (1st State)

3rd State

2nd State

1. Vending Machines

Wait for select button press

Initial State (1st State) Waiting for money

Return Money

Dispense Drink

Enough money

Not enough money

Wait for money return

Wait for more money

Wait for money return button press

No money