Distributed System Assignment

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class Lamport clock :
    def __init__(self):
        self.time = 0
    def tick(self):
        self.time t = 1
    def send_event(self):
        Self.tick()
        * return Self.time
    def receive_event(self, received_time):
        Self.time = max(self.time, received_time) + 1
if __name__ == "__main__":
        process_a = Lamport clock()
        process_b = Lamport clock()
        print("Initial times")
print(f"Process A : {Process_a.time}")
print(f"Process B : {Process_b.time}")
message_timestamp = Process_a.send_event()
print(f"\n Process A sends a message at time {message_time stamp}")
process_b.receive_event(message_timestamp)
print(f"Process B receives the message and updates its clock to
        {Process B.time}")

process_b.tick()
print(f"\n Process B sends a message at time {message_timestamp}")
process_a.receive_event(message_time stop}")
process_a.receive_event(message_timestop)
print(f"Process A receives the message and updates its clock
        to {Process.a time}").
```