Assignment 5

Due on Thursday, September 9, 2021 at 11:59 PM

Problem 1: Mutual Exclusion

You are working for a company that wants to develop a new mutual exclusion protocol.

(a) Describe the protocol you would choose.

(b) Explain why you chose this protocol.

Problem 2: Deadlock

You are working for a company that needs to prevent deadlocks in their system.

(a) Describe the protocol you would choose.

(b) Explain why you chose this protocol.

Problem 3: Resource Allocation

You are working for a company that needs to allocate resources efficiently.

(a) Describe the protocol you would choose.

(b) Explain why you chose this protocol.

Problem 4: Synchronization

You are working for a company that needs to synchronize processes.

(a) Describe the protocol you would choose.

(b) Explain why you chose this protocol.

Problem 5: Deadlock Prevention

You are working for a company that needs to prevent deadlocks in their system.

(a) Describe the protocol you would choose.

(b) Explain why you chose this protocol.

Problem 6: Resource Acquisition

You are working for a company that needs to acquire resources.

(a) Describe the protocol you would choose.

(b) Explain why you chose this protocol.

Problem 7: Resource Allocation

You are working for a company that needs to allocate resources efficiently.

(a) Describe the protocol you would choose.

(b) Explain why you chose this protocol.

Problem 8: Deadlock Detection

You are working for a company that needs to detect deadlocks.

(a) Describe the protocol you would choose.

(b) Explain why you chose this protocol.

Problem 9: Resource Consumption

You are working for a company that needs to manage resource consumption.

(a) Describe the protocol you would choose.

(b) Explain why you chose this protocol.

Problem 10: Resource Reallocation

You are working for a company that needs to reallocate resources.

(a) Describe the protocol you would choose.

(b) Explain why you chose this protocol.