STORY BOARD

SIMULATION OF DIFFERENT DEADLOCKS AND PREVENTION OF DEADLOCKS

START

STEP 1

Display the main menu

1. Simulation of deadlock creation
2. Simulation of deadlock Prevention
3. Simulation of deadlock Avoidance
4. Simulation of deadlock Detection and

STEP 2

Sub-Menu Options

Option 1: Demo on deadlock creation

➔ Deadlock happens when 4 conditions (Mutual-Exclusion, Hold and Wait, No-Preemption, Circular wait) occurs simultaneously.

STEP 3

Option 2: Demo on deadlock Prevention

➔ To prevent the occurrence of deadlock, we have to fail any one of the four conditions.

STEP 4

Option 3: Demo on deadlock Avoidance

→ OS checks whether the system is in safe state or in unsafe state at every step that OS performs

The request for any resource will be granted if the resulting state of the system doesn't cause deadlock in the system.

Implement **BANKER'S ALGORITHM**

→ To avoid deadlock

STEP

Option 4: Demo on deadlock Recovery

→In traditional OS we didn't use deadlock recovery. In real-time OS we use by Killing the process and Resource Preemption.

END