OS LAB ASSIGNENT-3

Date: 3/09/25

Q1. Implement CPU scheduling algorithm:
Highest Response Ratio next and Multilevel Queue. The Highest Response Ratio Next (HRRN) CPU scheduling algorithm, the process with the highest calculated response ratio is selected for execution. The response ratio is determined by the formula:
(Waiting Time + Next CPU Burst Time) / Next CPU Burst Time.

Q2. Write a C program to implement Memory Management concept using the following
algorithms.
a) Best fit
b) Worst fit
c) First fit
d) Next Fit algorithm and
Calculate the internal and external fragmentation

Q3. For a set of n number of processes with a memory requirement of Mi, implement TLB based memory access where the hot ratio is h, physical memory reference time is T and TLB access is time t.
Compare the experimental time with theoretical time