Operating System Labs July-Dec-2017

Assignment 3

Exercise 1: Write a program having two global array as shared variable between the two threads to be created by this program. First array is contains 10 numbers and second one is array of strings 8 strings. This program will create two threads as, the first thread will find maximum number in the first array and the second thread will find string with largest size. At last the main program will display the maximum number and largest string.

Exercise 2: Implement multi-threaded Round Robin scheduling algorithm by creating two threads in main program. Thread one will generate one or many processes after some time slice (using random numbers for process arrival time starting from 0 to n, its Burst time) and you can assume any suitable time quantum. The second thread performs the actual execution of these processes as per the Round Robin algorithm and displays the process execution sequence. At last, main program will display various performance matrices for each process including completion time, turnaround time, waiting time, response time and their averages for this execution. The generated arrival time should be in increasing order.