OPERATING SYSTEM - CS23431

EXP 6(D)

ROUND ROBIN CHEDULING

NAME: ARUL JOTHI P ROLL NO: 230701034

PROGRAM:

#include <stdio.h>

int main() {

int n; printf("Enter number of processes: "); scanf("%d", &n);

int p[n], a[n], bt[n], temptbt[n], slot; printf("Enter process ID, arrival time, burst time for each process:\n"); for (int i = 0; i < n; i++) { scanf("%d %d %d", &p[i], &a[i], &bt[i]); temptbt[i] = bt[i];

}

printf("Enter quantum time slot: "); scanf("%d", &slot);

int totalwt = 0, totalturn = 0, totaltime = 0; int i = 0, count = 0, completed = 0;

printf("P\_ID\tBT\tTAT\tWT\n");

while (completed != n) { if (temptbt[i] <= slot && temptbt[i] > 0) { totaltime += temptbt[i]; temptbt[i] = 0; count = 1;

} else if (temptbt[i] > 0) { totaltime += slot; temptbt[i] -= slot;

}

if (temptbt[i] == 0 && count == 1) { completed++; int tat = totaltime - a[i]; int wt = totaltime - a[i] - bt[i]; printf("%d\t%d\t%d\t%d\n", p[i], bt[i], tat, wt); totalwt += wt; totalturn += tat; count = 0;

}

if (i == n - 1) i = 0; else i++;

}

printf("Average waiting time is %d\n", totalwt / n); printf("Average turn around time is %d\n", totalturn / n);

return 0;

}

OUTPUT:

