**OPERATING SYSTEM - CS23431**

**EXP 6(D)**

**ROUND ROBIN CHEDULING**

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**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:**

