## Operating Systems Practical 8

Practical 8

# Aim : Write a program to calculate total waiting time and turn around time of n processes with SJF cpu scheduling algorithm .

**Code:**

#include<stdio.h>

int main() {

int time, burst\_time[10], at[10], sum\_burst\_time = 0, smallest, n, i; int sumt = 0, sumw = 0;

printf("enter the no of processes : "); scanf("%d", & n); for (i = 0; i < n; i++) { printf("the arrival time for process P%d : ", i + 1); scanf("%d", & at[i]); printf("the burst time for process P%d : ", i + 1); scanf("%d", & burst\_time[i]); sum\_burst\_time += burst\_time[i];

}

burst\_time[9] = 9999; for (time = 0; time < sum\_burst\_time;) {

smallest = 9; for (i = 0; i < n; i++) {

if (at[i] <= time && burst\_time[i] > 0 && burst\_time[i] < burst\_time[smallest]) smallest = i;

}

printf("P[%d]\t|\t%d\t|\t%d\n", smallest + 1, time + burst\_time[smallest] - at[smallest], time - at[smallest]);

sumt += time + burst\_time[smallest] - at[smallest]; sumw += time - at[smallest]; time += burst\_time[smallest]; burst\_time[smallest] = 0;

}

printf("\n\n average waiting time = %f", sumw \* 1.0 / n); printf("\n\n average turnaround time = %f", sumt \* 1.0 / n); return 0;

}

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# Output: