CPU Scheduling - First Come First Served (FCFS)

#include <stdio.h>

int main() {

int n, i;

int burst\_time[100], waiting\_time[100], turnaround\_time[100];

int total\_waiting\_time = 0, total\_turnaround\_time = 0;

printf("Enter the number of processes: ");

scanf("%d", &n);

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

printf("Enter burst time for Process %d: ", i + 1);

scanf("%d", &burst\_time[i]);

}

waiting\_time[0] = 0;

for (i = 1; i < n; i++) {

waiting\_time[i] = waiting\_time[i - 1] + burst\_time[i - 1];

}

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

turnaround\_time[i] = waiting\_time[i] + burst\_time[i];

total\_waiting\_time += waiting\_time[i];

total\_turnaround\_time += turnaround\_time[i];

}

printf("\nProcess\tBurst Time\tWaiting Time\tTurnaround Time\n");

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

printf("P%d\t%d\t\t%d\t\t%d\n", i + 1, burst\_time[i], waiting\_time[i], turnaround\_time[i]);

}

float avg\_waiting\_time = (float)total\_waiting\_time / n;

float avg\_turnaround\_time = (float)total\_turnaround\_time / n;

printf("\nAverage Waiting Time: %.2f", avg\_waiting\_time);

printf("\nAverage Turnaround Time: %.2f\n", avg\_turnaround\_time);

return 0;

}

