**FCFS**

**#include <stdio.h>**

**struct Process {**

**int id;**

**int burst\_time;**

**int arrival\_time;**

**int waiting\_time;**

**int turnaround\_time;**

**int completion\_time;**

**};**

**void fcfs(struct Process processes[], int n) {**

**int total\_waiting\_time = 0;**

**int total\_turnaround\_time = 0;**

**int current\_time = 0;**

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

**if (current\_time < processes[i].arrival\_time)**

**current\_time = processes[i].arrival\_time;**

**processes[i].waiting\_time = current\_time - processes[i].arrival\_time;**

**processes[i].completion\_time = current\_time + processes[i].burst\_time;**

**processes[i].turnaround\_time = processes[i].waiting\_time + processes[i].burst\_time;**

**total\_waiting\_time += processes[i].waiting\_time;**

**total\_turnaround\_time += processes[i].turnaround\_time;**

**current\_time = processes[i].completion\_time;**

**}**

**printf("Process ID\tBurst Time\tWaiting Time\tTurnaround Time\tCompletion Time\tArrival\n");**

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

**printf("%d\t\t%d\t\t%d\t\t%d\t\t%d\t\t%d\n", processes[i].id, processes[i].burst\_time,**

**processes[i].waiting\_time, processes[i].turnaround\_time, processes[i].completion\_time, processes[i].arrival\_time);**

**}**

**printf("Avg. waiting time= %.6f\n", (float)total\_waiting\_time / n);**

**}**

**int main() {**

**int n;**

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

**scanf("%d", &n);**

**struct Process processes[n];**

**printf("Enter process id of all the processes: ");**

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

**scanf("%d", &processes[i].id);**

**}**

**printf("Enter burst time of all the processes: ");**

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

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

**}**

**printf("Enter arrival time of all the processes: ");**

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

**scanf("%d", &processes[i].arrival\_time);**

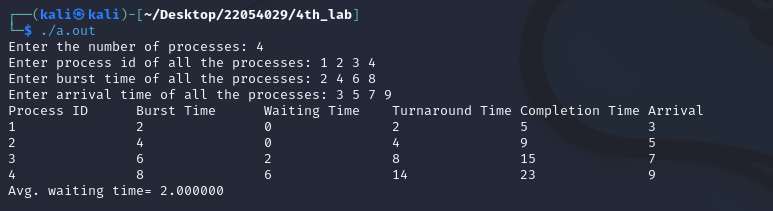
**}**

**fcfs(processes, n);**

**return 0;**

**}**

**Output**

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