

**LAB Assignment**

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| **Registration no:** | SP22-BCS-030 |

**Question no :01**

**Code:**

#include <stdio.h>

Void findWaitingTime(int processes[], int n, int bt[], int wt[], int quantum) {

Int rem\_bt[n];

For (int I = 0; I < n; i++)

Rem\_bt[i] = bt[i];

Int t = 0;

While (1) {

Int done = 1;

For (int I = 0; I < n; i++) {

If (rem\_bt[i] > 0) {

Done = 0;

If (rem\_bt[i] > quantum) {

T += quantum;

Rem\_bt[i] -= quantum;

} else {

T += rem\_bt[i];

Wt[i] = t – bt[i];

Rem\_bt[i] = 0;

}

}

}

If (done == 1)

Break;

}

}

Void findTurnAroundTime(int processes[], int n, int bt[], int wt[], int tat[]) {

For (int I = 0; I < n; i++)

Tat[i] = bt[i] + wt[i];

}

Void findavgTime(int processes[], int n, int bt[], int quantum) {

Int wt[n], tat[n], total\_wt = 0, total\_tat = 0;

findWaitingTime(processes, n, bt, wt, quantum);

findTurnAroundTime(processes, n, bt, wt, tat);

printf(“Processes Burst time Waiting time Turnaround time\n”);

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

total\_wt += wt[i];

total\_tat += tat[i];

printf(“ %d\t\t%d\t\t%d\t\t%d\n”, processes[i], bt[i], wt[i], tat[i]);

}

Printf(“Average waiting time = %.2f\n”, (float)total\_wt / (float)n);

Printf(“Average turnaround time = %.2f\n”, (float)total\_tat / (float)n);

}

Int main() {

Int processes[] = {1, 2, 3};

Int n = sizeof processes / sizeof processes[0];

Int burst\_time[] = {10, 5, 8};

Int quantum = 4;

findavgTime(processes, n, burst\_time, quantum);

return 0;

}