

Ex No.: 6a FIRST COME FIRST SERVE SCHEDULING

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Aim :

To implement First-come First- serve (FCFS) scheduling technique

Code:

```
#include<stdio.h>
int main()
{
    int n;
    printf("Enter the no of processes: ");
    scanf("%d",&n);
    int pro[n],bt[n],at[n],wt[n],tat[n],ct[n];
    float total_wt = 0, total_tat = 0;
    printf("Enter the Burst time and Arival time : \n");
    for(int i=1;i<=n;i++)
    {
        printf("process %d Burst time: ",i);
        scanf("%d",&bt[i]);

    }
    for(int i=1;i<=n;i++)
    {
        printf("process %d arival time: ",i);
        scanf("%d",&at[i]);
    }
    for (int i = 1; i < n ; i++) {
        for (int j = 1; j < n - i ; j++) {
            if (at[j] > at[j + 1]) {
                int temp;
                temp = at[j];
                at[j] = at[j + 1];
                at[j + 1] = temp;

                temp = bt[j];
                bt[j] = bt[j + 1];
                bt[j + 1] = temp;
            }
        }
    }
    ct[1]=bt[1];
    for(int i=2;i<=n;i++)
    {
```

```

        ct[i]=bt[i]+ct[i-1];
    }

    for(int i=1;i<=n;i++)
    {
        tat[i]=ct[i]-at[i];
        total_tat += tat[i];
    }

    for(int i=1;i<=n;i++)
    {
        wt[i]=tat[i]-bt[i];
        total_wt += wt[i];
    }

    float avg_wt = total_wt / n;
    float avg_tat =total_tat / n;

    printf("Processes  Arrival time  Burst time  Completion time  Turn around time
Waiting time\n");
    for (int i = 1; i <=n; i++)
    {
        printf("   %d      %d      %d      %d      %d      %d\n", (i+1), at[i],
bt[i], ct[i], tat[i], wt[i]);
    }

    printf("Average waiting time = %.2f\n", avg_wt);
    printf("Average turn around time = %.2f\n", avg_tat);

    return 0;
}

```

Output:

```
Enter the no of processes: 3
Enter the Burst time and Arival time :
process 1 Burst time: 12
process 2 Burst time: 4
process 3 Burst time: 1
process 1 arival time: 0
process 2 arival time: 0
process 3 arival time: 0
Processes   Arrival time   Burst time   Completition time   Turn around time   Waiting time
    2         0         12         12         12         0
    3         0         4         16         16         12
    4         0         1         17         17         16
Average waiting time = 9.33
Average turn around time = 15.00
```

Result:

Thus the implement First-come First- serve (FCFS) scheduling technique has been executed successfully.