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Paper Name - Midterm Practical Operating System
Paper Code - PB1202

Question-2.

```c
# include <stdio.h>
int main()
{
    int bt[20], p[20], wt[20], tat[20], i, j, n, total = 0, pos, temp;
    float avg_wt, avg_tat;
    printf("Enter number of process : ");
    scanf("%d", &n);
    printf("\n Enter Burst Time : \n");
    for(i=0; i<n; i++)
    {
        printf("p%d :", i+1);
        scanf("%d", &bt[i]);
        p[i]=i+1;
    }
    for(i=0; i<n; i++)
    {
        pos=i;
        for(j=i+1; j<n; j++)
        {
```

```c
if (bt [j] < bt [pos])
pos = j;
}
temp = bt [i];
bt [i] = bt [pos];
bt [pos] = temp;
temp = p[i];
p[i] = p[pos];
p[pos] = temp;
}

wt [0] = 0;
for (i=1 ; i < n; i++)
{
wt [i] = 0;
for (j =0; j < i; j++)
wt [i] + = bt [j];
total + = wt [i];
}
avg - wt = (float) total /n;
total = 0;
printf ("\n Process\t Burst Time \tWaiting Time\
tTurnaround Time");
for (i = 0; i < n; i++)
```

```c
    {
        tat[i] = bt[i] + wt[i];
        total += tal[i];
        printf("\n p%d \t\t %d\t\t %d\t\t\t %d",
            p[i], bt[i], wt[i], tat[i]);
    }

    avg_tat = (float) total/n;
    printf("\n\n Average Waiting Time = %f", avg_wt);
    printf("\n Average Turnaround Time = %f\n", avg_tat);
}
```

Deepak

```
input
nter number of process:4

nter Burst Time:
1:10
2:2
3:1
4:4

rocess          Burst Time                Waiting Time        Turnaround Time
3                   1                          0                     1
2                   2                          1                     3
4                   4                          3                     7
1                  10                          7                    17

verage Waiting Time=2.750000
verage Turnaround Time=7.000000


..Program finished with exit code 0
ress ENTER to exit console.
```