

Name: Rahul Singh Rawat
Student ID: 0051061

Date

Ans 2) ~~#include~~ #include <stdio.h>

```
int main()
{
    int bt(20), p(20); wt(20), fat(20); i, j, n;
    total = 0; pos; temp;
    float avg_wt, avg_fat;
    printf("Enter number of processes: ");
    scanf("%d", &n);
    printf("Enter Burst Time: ");
    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++)
        {
            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 Burst
Time + Waiting time + Turnaround Time")
for(i=0; i < n; i++)

```
{  
    tat(i) = bt(i) + wt(i);  
    total += tat(i);  
}
```

```
printf("\n p %d dt %d wt %d tat %d",  
p[i], bt(i), wt(i), tat(i));
```

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

```
printf("\n A.T T = %d", avg_tat);
```

```
return 0;
```

```
}
```

Prac

TERMINAL

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Try the new cross-platform PowerShell <https://aka.ms/powershell>

Warning: PowerShell detected that you might be using a screen reader and has disabled 'PSReadLine' module 'PSReadLine'.

PS C:\Users\DELL\Desktop> cd "c:\Users\DELL\Desktop\" ; if (\$?) { gcc sjf.c -o sjf } ; if (\$?) { .\sjf }

Enter the number of process: 4

Enter process name, arrival time& execution time: p1 0 10

Enter process name, arrival time& execution time: p2 0 2

Enter process name, arrival time& execution time: p3 0 1

Enter process name, arrival time& execution time: p4 0 4

Pname	arrivaltime	executiontime	waitingtime	tatime
p3	0	1	0	1
p2	0	2	1	3
p4	0	4	3	7
p1	0	10	7	17

Average waiting time is:2.750000

Average turnaroundtime is:7.000000

PS C:\Users\DELL\Desktop>