

Qx C program to implement SJF CPU scheduling

↪ #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("\nEnter 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++)



```

{
    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("nProcess Burst Time      twaiting Time T
       Turnaround Time");

```



```
for (i = 0; i < n; i++)
```

```
{  
    tat[i] = bt[i] + wt[i];
```

```
    total += tat[i]
```

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

```
}
```

```
avg-tat = (float) total / n;
```

```
printf ("Average waiting Time = %f", avg-wt);
```

```
printf ("Average Turnaround Time = %f", avg-tat);
```

```
return 0;
```

```
}
```

