
Program:

```
#include<stdio.h>
int main()
{
    int st[10],bt[10],wt[10],tat[10],n,tq;
    int i,count=0,swt=0,stat=0,temp,sq=0;
    float awt,atat;
    printf("Enter the number of processes:");
    scanf("%d",&n);
    printf("Enter the burst time of each process: \n");
    for(i=0;i<n;i++)
    {
        printf("p %d:",i+1);
        scanf("%d",&bt[i]);
        st[i]=bt[i];
    }
    printf("Enter the time quantum:");
    scanf("%d",&tq);
    while(1)
    {
        for(i=0,count=0;i<n;i++)
        {
            temp=tq;
            if(st[i]==0)
            {
                count++;
                continue;
            }
            if(st[i]>tq)
                st[i]=st[i]-tq;
            else
            {
                if(st[i]>=0)
                {
                    temp=st[i];
                    st[i]=0;
                }
                sq=sq+temp;
                tat[i]=sq;
            }
        }
        if(n==count)
            break;
    }
}
```

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for(i=0;i<n;i++)
{
wt[i]=tat[i]-bt[i];
swt=swt+wt[i];
stat=stat+tat[i];
}
awt=(float)swt/n;
atat=(float)stat/n;
printf("process no\t burst time\t waiting time\t turnaround time\n");
for(i=0;i<n;i++)
printf("%d\t\t %d\t\t %d\t\t %d\n",i+1,bt[i],wt[i],tat[i]);
printf("avg wt time=%f,avg turn around time=%f",awt,atat);
}

```

Output:

```

Enter the number of processes:10
Enter the burst time of each process:
p 1:9
p 2:7
p 3:6
p 4:14
p 5:25
p 6:2
p 7:1
p 8:4
p 9:8
p 10:0
Enter the time quantum:2
process no      burst time      waiting time      turnaround time
1               9               44               53
2               7               39               46
3               6               31               37
4               14              49               63
5               25              51               76
6               2               10               12
7               1               12               13
8               4               25               29
9               8               44               52
10              0               32767            32767
avg wt time=3307.199951,avg turn around time=3314.800049

```
