

```
#include<stdio.h>
```

```
void main()
```

```
{
```

```
    int i, NOP, sum=0,count=0, y, quant, wt=0, tat=0, at[10], bt[10], temp[10];
```

```
    float avg_wt, avg_tat;
```

```
    printf(" Total number of process in the system: ");
```

```
    scanf("%d", &NOP);
```

```
    y = NOP;
```

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

```
    {
```

```
        printf("\n Enter the Arrival and Burst time of the Process[%d]\n", i+1);
```

```
        printf(" Arrival time is: \t");
```

```
        scanf("%d", &at[i]);
```

```
        printf(" \nBurst time is: \t");
```

```
        scanf("%d", &bt[i]);
```

```
        temp[i] = bt[i];
```

```
    }
```

```
    printf("Enter the Time Quantum for the process: \t");
```

```
    scanf("%d", &quant);
```

```
    printf("\n Process No\t\tBurst Time\t\tTAT\t\tWaiting Time ");
```

```
    for(sum=0, i = 0; y!=0; )
```

```
    {
```

```
        if(temp[i] <= quant && temp[i] > 0)
```

```
        {
```

```
            sum = sum + temp[i];
```

```
            temp[i] = 0;
```

```
            count=1;
```

```
        }
```

```
        else if(temp[i] > 0)
```

```
        {
```

```
            temp[i] = temp[i] - quant;
```

```
            sum = sum + quant;
```

```
        }
```

```
        if(temp[i]==0 && count==1)
```

```
        {
```

```
            y--;
```

```
            printf("\nProcess No[%d] \t\t %d \t\t %d \t\t %d", i+1, bt[i], sum-at[i], sum-at[i]-bt[i]);
```

```
            wt = wt+sum-at[i]-bt[i];
```

```
            tat = tat+sum-at[i];
```

```
            count =0;
```

```
        }
```

```
        if(i==NOP-1)
```

```
        {
```

```
            i=0;
```

```
        }
```

```

else if(at[i+1]<=sum)
{
    i++;
}
else
{
    i=0;
}
}

avg_wt = wt * 1.0/NOP;
avg_tat = tat * 1.0/NOP;
printf("\n Average Turn Around Time: \t%f", avg_wt);
printf("\n Average Waiting Time: \t%f", avg_tat);

}

```

output:

avcoe@avcoe-HP-ProDesk-400-G1-SFF:~\$ gcc RRK.c

avcoe@avcoe-HP-ProDesk-400-G1-SFF:~\$./a.out

Total number of process in the system: 4

Enter the Arrival and Burst time of the Process[1]

Arrival time is: 0

Burst time is: 4

Enter the Arrival and Burst time of the Process[2]

Arrival time is: 2

Burst time is: 5

Enter the Arrival and Burst time of the Process[3]

Arrival time is: 4

Burst time is: 7

Enter the Arrival and Burst time of the Process[4]

Arrival time is: 5

Burst time is: 9

Enter the Time Quantum for the process: 3

Process No	Burst Time	TAT	Waiting Time
Process No[1]	4	13	9
Process No[2]	5	13	8
Process No[3]	7	18	11
Process No[4]	9	20	11
Average Turn Around Time: 9.750000			
Average Waiting Time: 16.000000			