

```

#include<stdio.h>
int 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; // Assign the number of process to variable y
    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\t Burst Time \t\t TAT \t\t Waiting 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\t\t %d\t\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);
    return 0;
}

```

output:

```
cc-14@cc14-HP-ProDesk-400-G1-SFF: ~/Desktop
File Edit View Search Terminal Help
dcc-14@cc14-HP-ProDesk-400-G1-SFF:~$ cd Desktop
cc-14@cc14-HP-ProDesk-400-G1-SFF:~/Desktop$ cc exp14.c
cc-14@cc14-HP-ProDesk-400-G1-SFF:~/Desktop$ ./a.out
Incoming      Frame 1      Frame 2      Frame 3
4              4              -              -
1              4              1              -
2              4              1              2
4              4              1              2
5              5              1              2
Total Page Faults: 4
cc-14@cc14-HP-ProDesk-400-G1-SFF:~/Desktop$
```