Name - Kareena Dhiman
University Roll no. - 1921081
Paper - Operating System (Practical) Back
Code - PBC 402

Kareena.
Sheet - (1)

Question - 1

Solution - 1

```
#include <stdio.h>
int main()
{
int at[10], bt[10], temp[10];
int i, small, count=0, time, limit;
double wt=0, tat=0, end;
float awgwt, awgtat;
printf ("Enter the total number of customers:");
scanf ("%od", & limit);
printf ("Enter details of %d process", limit);
for (i=0; i< limit; i++)
{
printf ("Enter Arrival Time:");
scanf ("%d", & at[i]);
printf ("Enter Seared Time:");
scauf ("%d", & bt[i]);
temp[i] = bt[i];
}
bt[9] = 9999;
for (time=0; count != limit; time++)
{
small = 9;
for (i=0; i < limit; i++)
{
if (at[i] <= time && bt[i] < bt[small] && bt[i]>0)
{
small = i;
}
```

guest - ②
Kareena

```
    }
    bt[small]--;
    if (bt[small]==0)
    {
        count++;
        end = time+1;
        wt = wt + end - at[small] - temp[small];
        tat = tat + end - at[small];
    }
}
    avgwt = wt / limit;
    avgtat = tat / limit;
    printf("\n Minimum Average Waiting Time: \t%f\n", avgwt);
    printf("\n Average Turnaround Time: \t%f\n", avgtat);
    return 0;
}
```

```
Enter the Total Number of Costomers:    3

Enter Details of 3 Processesn
Enter Arrival Time:     0
Enter Served Time:      3

Enter Arrival Time:     1
Enter Served Time:      9

Enter Arrival Time:     2
Enter Served Time:      6


Minimum Average Waiting Time:   3.000000
Average Turnaround Time:        9.000000


...Program finished with exit code 0
Press ENTER to exit console.
```

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Paper - Operating System (Practical) Lab
Code - PBCT402

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Sheet-①

Question-2

Solution 2.

```
#include<stdio.h>
 int main()
{
 int at[10], bt[10], temp[10];
 int i, small, count=0, time, limit;
 double wt=0, tat=0, end;
 float avgwt, avgtat;
printf("Enter the total number of process:");
 scanf("%d", &limit);
printf("Enter details of %d process", limit);
for(i=0; i<limit; i++)
{
printf("Enter Arrival Time");
scanf("%d", &at[i]);
printf("Enter Burst Time");
scanf("%d", bt[i]);
temp[i] = bt[i];
}
 bt[9] = 9999;
for(time=0; count!=limit; time++)
{
 small=9;
for(i=0; i<limit; i++)
{
```

```
    if (at[i] <= time && bt[i] < bt[small] && bt[i] > 0)
{
    small = i;
    }
}
    bt[small] --;
    if (bt[small] == 0)
{
    count ++;
    end = time + 1;
    wt = wt + end - at[small] - temp[small];
    tat = tat + end - at[small];
}
}
    awt = wt/limit;
    atat = tat/limit;
printf("\n Average Waiting Time : \t %lf \n" awgwt);
printf("\n Average TurnAround Time : \t %lf \n", awtat);
return 0;
}
```

Sheet - (2)

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2.

```
Enter the Total Number of Processes:    4

Enter Details of 4 Processesn
Enter Arrival Time:     0
Enter Burst Time:       10

Enter Arrival Time:     0
Enter Burst Time:       2

Enter Arrival Time:     0
Enter Burst Time:       1

Enter Arrival Time:     0
Enter Burst Time:       4


Average Waiting Time:   2.750000
Average Turnaround Time:        7.000000


...Program finished with exit code 0
Press ENTER to exit console.
```