Ex. No.: 6c)
Date: 28/2/25

PRIORITY SCHEDULING

Aim:

To implement priority scheduling technique

Algorithm:

1. Get the number of processes from the user.
2. Read the process name, burst time and priority of process.
3. Sort based on burst time of all processes in ascending order based priority 4.
Calculate the total waiting time and total turnaround time for each process 5.
Display the process name & burst time for each process.
6. Display the total waiting time, average waiting time, turnaround time

Program Code:

```
from operator import itemgetter
n = int(input("Enter the number of process : "))
list1 = []
tat = []
for i in range(0,n):
    P_name = input("Enter the process name : ")
    bt = int(input("Enter the Burst Time : "))
    prio = int(input("Enter priority : "))
    list1.append([p_name, bt, prio])
    list1 = sorted(list1, key = itemgetter(2))
    tat.append(list1[0][1])
    for i in range(1,n):
        t = tat[i-1]+list1[i][1]
        tat.append(t)
        wt[]
for i in range(0,n):
    t = tat[i]-list1[i][1]
    wt.append(t)
print("Process\t\tBurst Time\t
    Priority\t Turn Around Time\t
    WaitingTime")
```

```
for i in range(0,n):
    print("\n",list1[i][0],"\t\t",list1[i][3],
      "\t\t",list1[i][i],"\t\t\t",tat[i],"\t\t\t",
        wt[i])

sum=0
sum1=0
for i in range(0,n):
    sum+=tat[i]
    sum1+=wt[i]
print("Average Turn Around Time: ",sum/n)
print("Average waiting Time: ",sum1/n)
```

output

Enter the number of process: 5
Enter the Process name: P1
Enter the Burst time: 10
Enter priority: 3

Enter the process name: P2
Enter the burst time: 1
Enter priority: 1

Enter the process name: P3
Enter the burst time: 2
Enter priority: 4

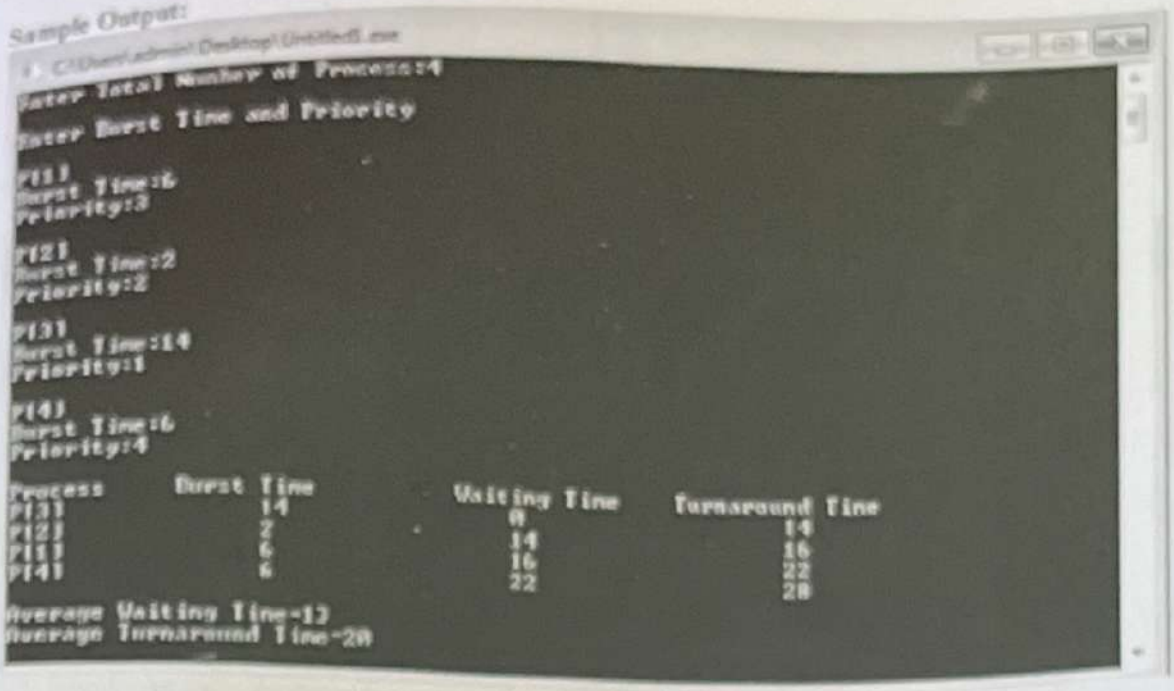
Enter the process name: P4
Enter the burst time: 1
Enter the priority: 5

Enter the process name: P5
Enter the burst time 5
Enter priority: 2

Process	Burst time	priority	Turn Around Time	waiting Time
P2	1	1	1	0
P5	2	5	6	1
P1	3	10	16	6
P3	4	2	18	16
P4	5	1	19	18

Average turn around time: 12.0
Average waiting time: 8.2

Sample Output:



Result: Process scheduling has been done using Priority algorithm and the result has been verified.