

WEEK 2: Process Creation and Termination

Date: 28/06/2021

OBJECTIVE:

Understanding the Scheduling Algorithms: Shortest Job first and Priority based scheduling;

- CPU SCHEDULING CONCEPTS ARE ALREADY COVERED IN THEORY.
- STUDENTS ARE ADVISED TO REFER TO THE TEXT BOOK AND THE LECTURE MATERIAL SHARED IN THE CLASS TO IMPLEMENT THE GIVEN PROGRAMS.
- STUDENTS ARE REQUIRED TO PROVIDE PROOF OF CONDUCTION (AS PER SUBMISSION BELOW) FOR BOTH THE PROGRAMS.

SUBMISSION:

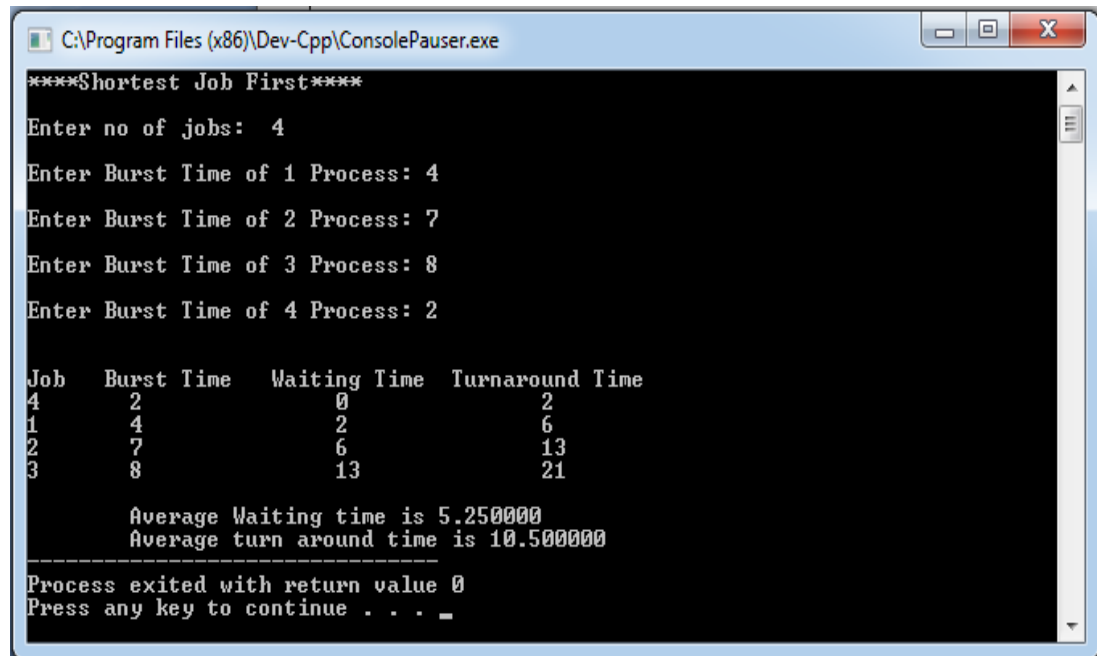
1. All the source code files for the actual programs should be uploaded to EDMODO separately in PDF FORMAT.
2. All the screenshots clearly showing the directory name as SRN_NAME_WEEK3, all the output, results for the actual programs and the answers to 5 QUESTIONS should be uploaded to EDMODO in a SEPARATE FILE (Word or PDF format only, Do NOT zip this file). So, even the answers to the questions asked at the end of this document should go into the same file.

Contact me for any questions or clarifications needed.

PROGRAMS FOR EXECUTION AND SUBMISSION:

1. Write a C program to implement Shortest-Job-First scheduling algorithm

Expected Output:



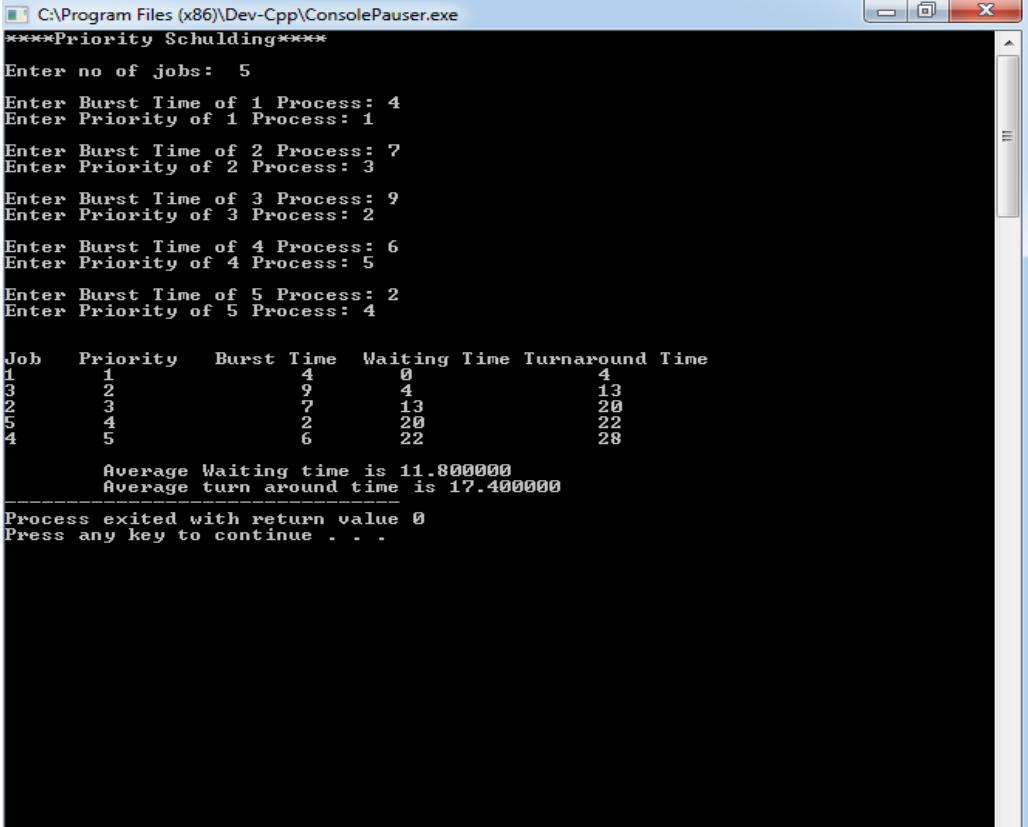
```
C:\Program Files (x86)\Dev-Cpp\ConsolePauser.exe
****Shortest Job First****
Enter no of jobs: 4
Enter Burst Time of 1 Process: 4
Enter Burst Time of 2 Process: 7
Enter Burst Time of 3 Process: 8
Enter Burst Time of 4 Process: 2

Job   Burst Time   Waiting Time   Turnaround Time
4      2             0              2
1      4             2              6
2      7             6             13
3      8            13             21

      Average Waiting time is 5.250000
      Average turn around time is 10.500000
-----
Process exited with return value 0
Press any key to continue . . . _
```

2. Write a C program to implement Priority Scheduling algorithm.

Expected output



```
****Priority Schudling****
Enter no of jobs: 5
Enter Burst Time of 1 Process: 4
Enter Priority of 1 Process: 1
Enter Burst Time of 2 Process: 7
Enter Priority of 2 Process: 3
Enter Burst Time of 3 Process: 9
Enter Priority of 3 Process: 2
Enter Burst Time of 4 Process: 6
Enter Priority of 4 Process: 5
Enter Burst Time of 5 Process: 2
Enter Priority of 5 Process: 4

Job  Priority  Burst Time  Waiting Time  Turnaround Time
1      1          4           0             4
3      2          9           4            13
2      3          7          13            20
5      4          2          20            22
4      5          6          22            28

Average Waiting time is 11.800000
Average turn around time is 17.400000
-----
Process exited with return value 0
Press any key to continue . . .
```

NOTE:

Your programs can take input in the manner shown in the screenshots or in any other manner. Output should be printed in the same format as shown in the screenshots clearly showing Average Waiting time and Turnaround time values.