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Subject & Section: CCOPSYSL – COM232

Professor: Mr. Gaudencio Jeffrey G. Romano

Laboratory #5: LAB-ACT5: HRRN ALGORITHM

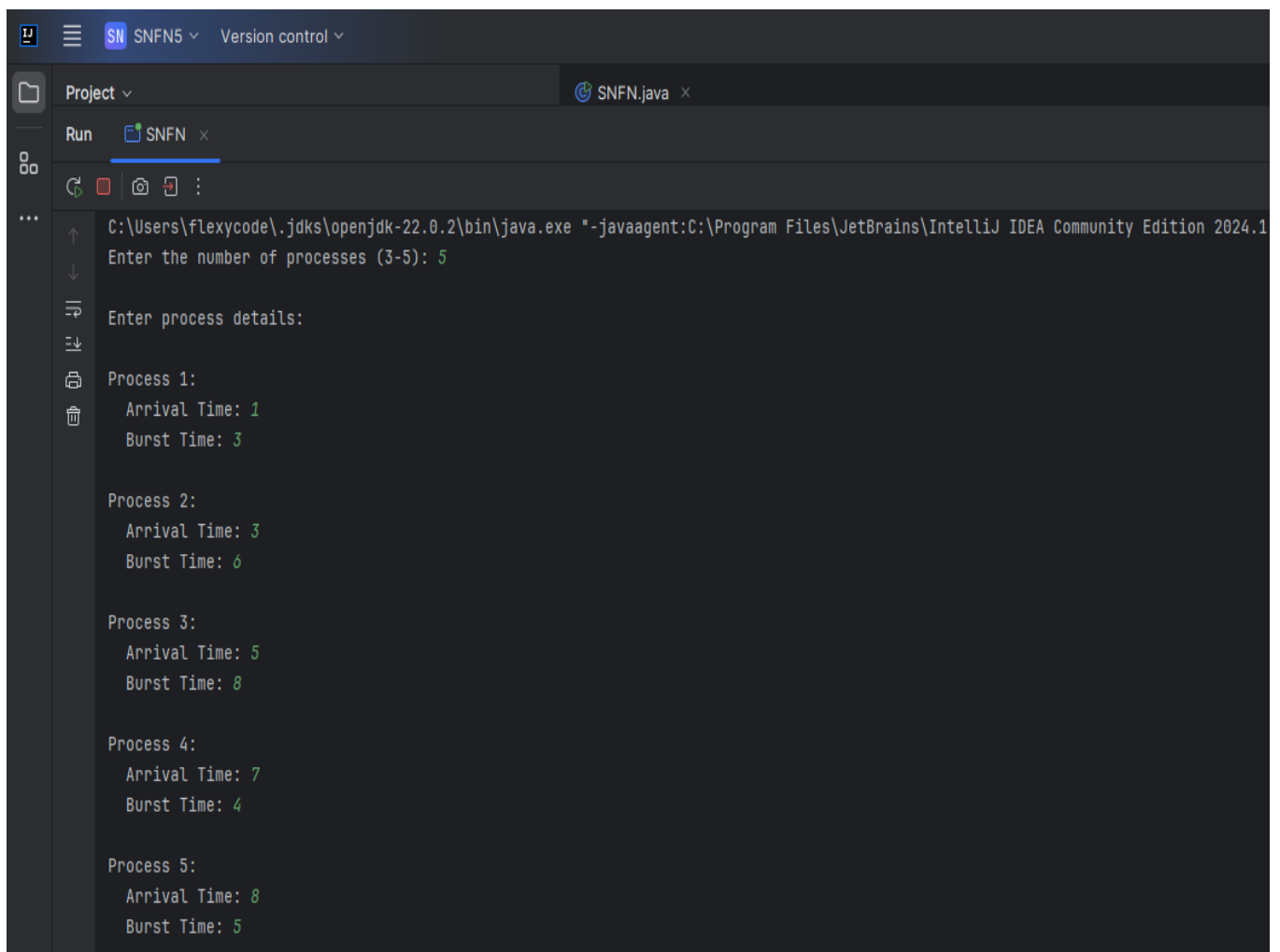
Instruction:

Make a program in java for HRRN (Highest response ration next) scheduling algorithm.

Sample Input / Output Screenshot #1:

Number of processes: 5

Process details: (Arrival Time, Burst Time)



```
C:\Users\flexycod\jdk\openjdk-22.0.2\bin\java.exe "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2024.1
Enter the number of processes (3-5): 5

Enter process details:

Process 1:
  Arrival Time: 1
  Burst Time: 3

Process 2:
  Arrival Time: 3
  Burst Time: 6

Process 3:
  Arrival Time: 5
  Burst Time: 8

Process 4:
  Arrival Time: 7
  Burst Time: 4

Process 5:
  Arrival Time: 8
  Burst Time: 5
```

Process 1: 1, 3
Process 2: 3, 6
Process 3: 5, 8
Process 4: 7, 4
Process 5: 8, 5

Sample Input / Output Screenshot #2:

Process Table (AT, BT, CT, TT, WT and RT) and Performance Metrics

PID	Arrival Time	Burst Time	Completion Time	Turnaround Time	Waiting Time	Response Time
P1	1	3	4	3	0	0
P2	3	6	10	7	1	1
P3	5	8	27	22	14	14
P4	7	4	14	7	3	3
P5	8	5	19	11	6	6

PERFORMANCE METRICS

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Average Turnaround Time: 10.00 ms

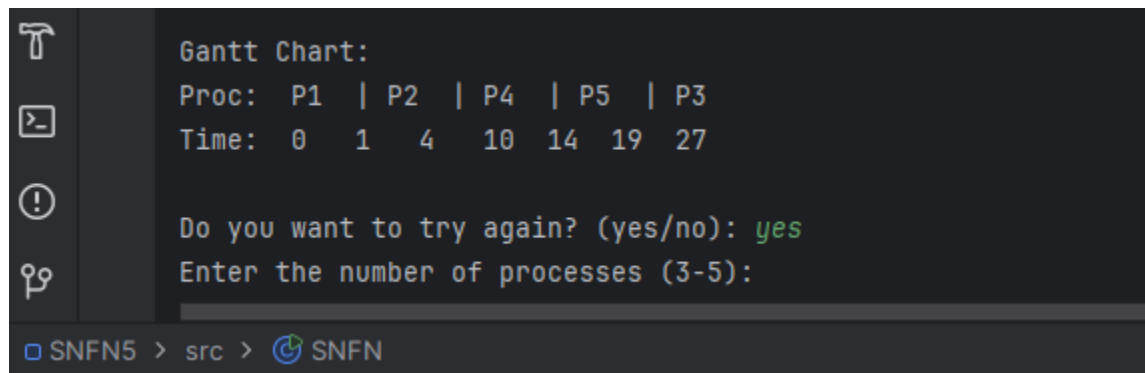
Average Waiting Time: 4.80 ms

Average Response Time: 4.80 ms

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Sample Input / Output Screenshot #3:

Gantt Chart and input program for user if he/she wants to try again:



```
Gantt Chart:
Proc:  P1  | P2  | P4  | P5  | P3
Time:  0   1   4   10  14  19  27

Do you want to try again? (yes/no): yes
Enter the number of processes (3-5):
```

□ SNFN5 > src >  SNFN

The screenshot shows a terminal window with a dark background. On the left side, there is a vertical toolbar with four icons: a hammer, a terminal window, an exclamation mark, and a person. The main area of the terminal displays a Gantt Chart for five processes (P1, P2, P4, P5, P3) with their respective start and end times. Below the chart, it asks the user if they want to try again, with 'yes' entered. Then it asks for the number of processes, with '3-5' entered. At the bottom, the terminal shows the current directory as 'src' and a logo for 'SNFN'.