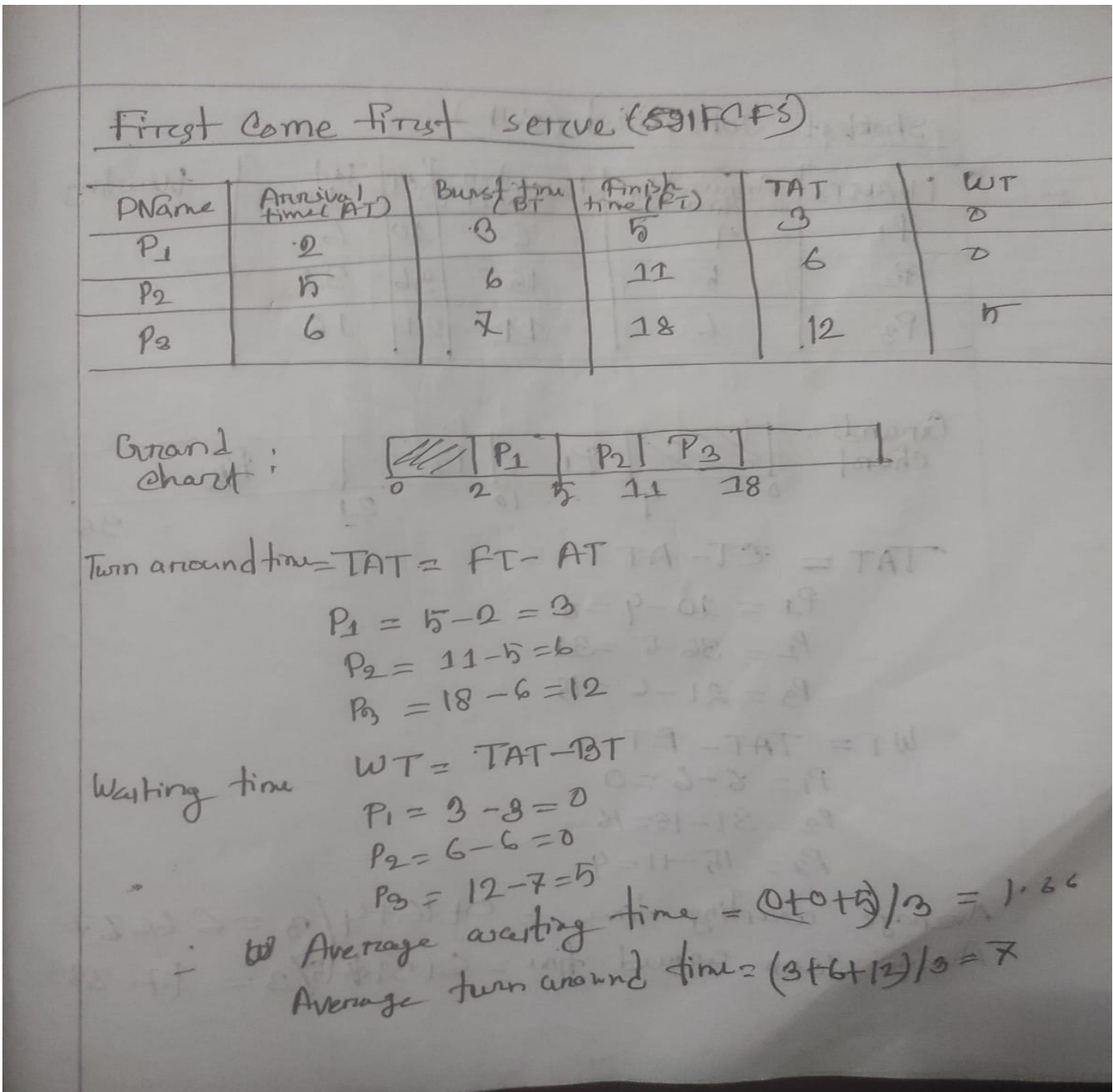


First Come First Serve (FCFS)



Lab-6 - CoCalc

cocalc.com/projects/d0ffdd33-93e7-414c-b56b-5afe4dc4086d/files/2022-07-05-113319.term

ProjectsLab-6

HelpAccount

Free Trial (Day 14) – buy a license (starting at less than \$4/month) and then apply it to this project. Otherwise, expect VERY bad performance (up to several times slower!) and you can't install packages, clone from GitHub, or download datasets. – more info...

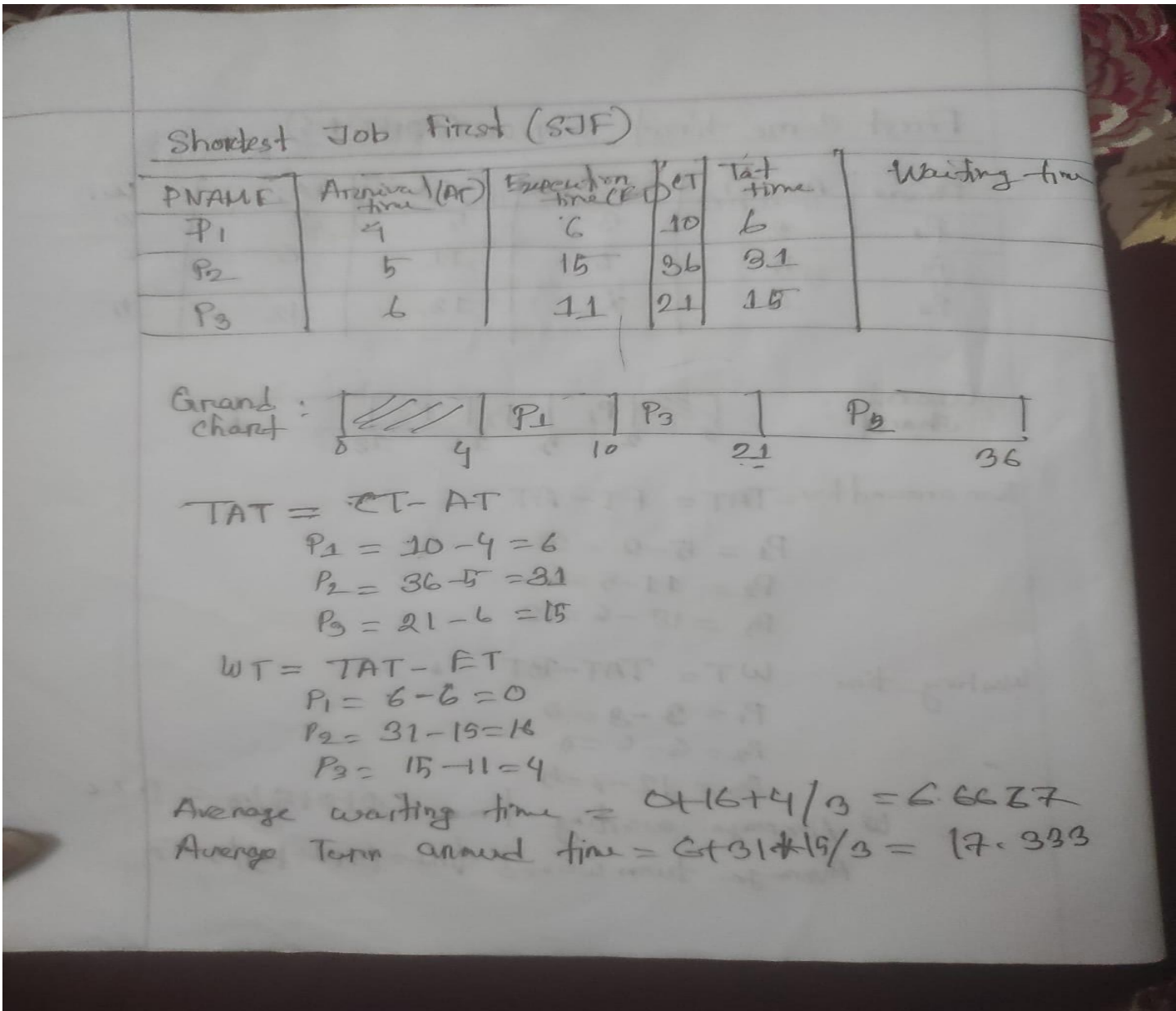
FilesNewLogFindSettingsProcesses2022-07-05-113319.term2022-07-05-113346.termChatPrivate

FilePauseCopyPasteUndoRedoGuideHelpTerminal

```
~$ nano FCFS.c
~$ gcc FCFS.c -o FCFS
~$ ./FCFS
Enter the number of processes:3
Enter the Process Name, Arrival Time & Burst Time:p1 2 3
Enter the Process Name, Arrival Time & Burst Time:p2 5 6
Enter the Process Name, Arrival Time & Burst Time:p3 6 7

PName Arrtime Burtime Start TAT Finish
p1      2        3      2     3     5
p2      5        6      5     6    11
p3      6        7      7    12    18
Average Waiting time:1.66667
~$
```

Shortest Job First (SJF)



Lab-6 - CoCalc

cocalc.com/projects/d0ffdd33-93e7-414c-b56b-5afe4dc4086d/files/2022-07-05-113319.term

ProjectsLab-6HelpAccount

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FilesNewLogFindSettingsProcesses2022-07-05-113319.term2022-07-05-113346.termChatPrivate

File–+PauseCopyPasteUndoRedoHelp~Terminal

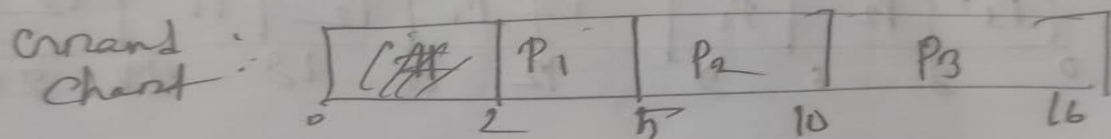
```
~$ nano sjf.c
~$ gcc sjf.c -o sjf
~$ ./sjf
Enter the number of process:3
Enter process name, arrival time & execution time:p1 4 6
Enter process name, arrival time & execution time:p2 5 15
Enter process name, arrival time & execution time:p3 6 11

Pname  arrivaltime  executiontime  waitingtime  tatime
p1      4             6              0            6
p3      6             11             4            15
p2      5             15             16           31
Average waiting time is:6.66667
Average turnaroundtime is:17.333334-$
```



**Priority**

PName	Arrival time (AT)	Execution time (ET)	Priority	CT	TAT Time	Waiting time
P <sub>1</sub>	2	3	1	5	3	0
P <sub>2</sub>	4	5	2	10	6	1
P <sub>3</sub>	5	6	3	16	11	5



$$TAT = CT - AT$$
$$P_1 = 5 - 2 = 3$$
$$P_2 = 10 - 4 = 6$$
$$P_3 = 16 - 5 = 11$$

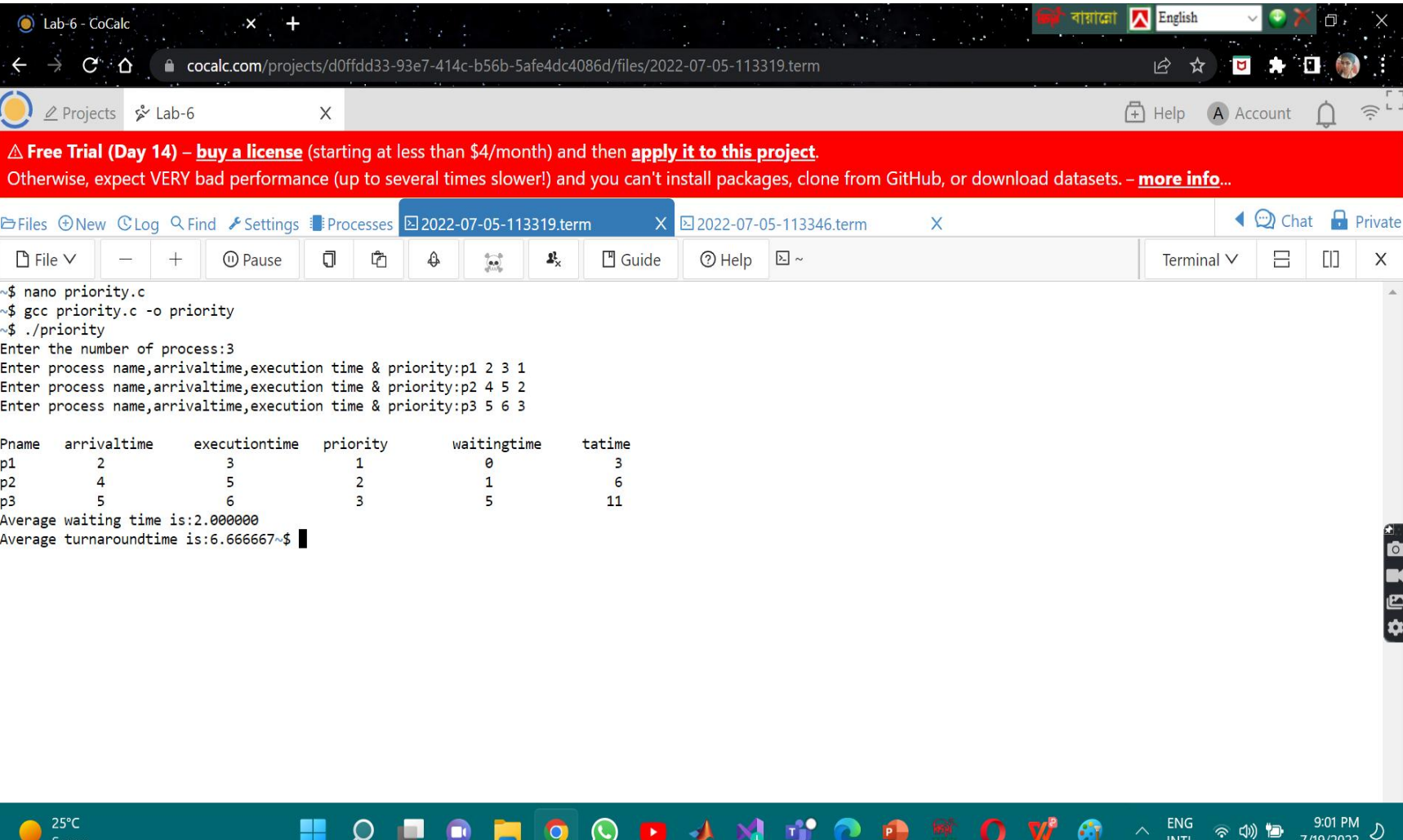
$$W_T = \textcircled{0} \text{ TAT-ET}$$

$$P_1 = 3 - 3 = 0$$

$$P_2 = 6 - 5 = 1$$

$$P_3 = \text{14} - 9 = 5$$

Average waiting time =  $0 + 1 + 6/3 = 2.00$   
Average Turn around time =  $3 + 6 + 11/3 = 6.6667$



The screenshot shows a web browser window with the CoCalc interface. A terminal window is open, displaying the following text:

```

~$ nano priority.c
~$ gcc priority.c -o priority
~$ ./priority
Enter the number of process:3
Enter process name,arrivaltime,execution time & priority:p1 2 3 1
Enter process name,arrivaltime,execution time & priority:p2 4 5 2
Enter process name,arrivaltime,execution time & priority:p3 5 6 3

Pname  arrivaltime  executiontime  priority  waitingtime  tatime
p1      2           3           1         0           3
p2      4           5           2         1           6
p3      5           6           3         5          11

Average waiting time is:2.000000
Average turnaroundtime is:6.666667~$

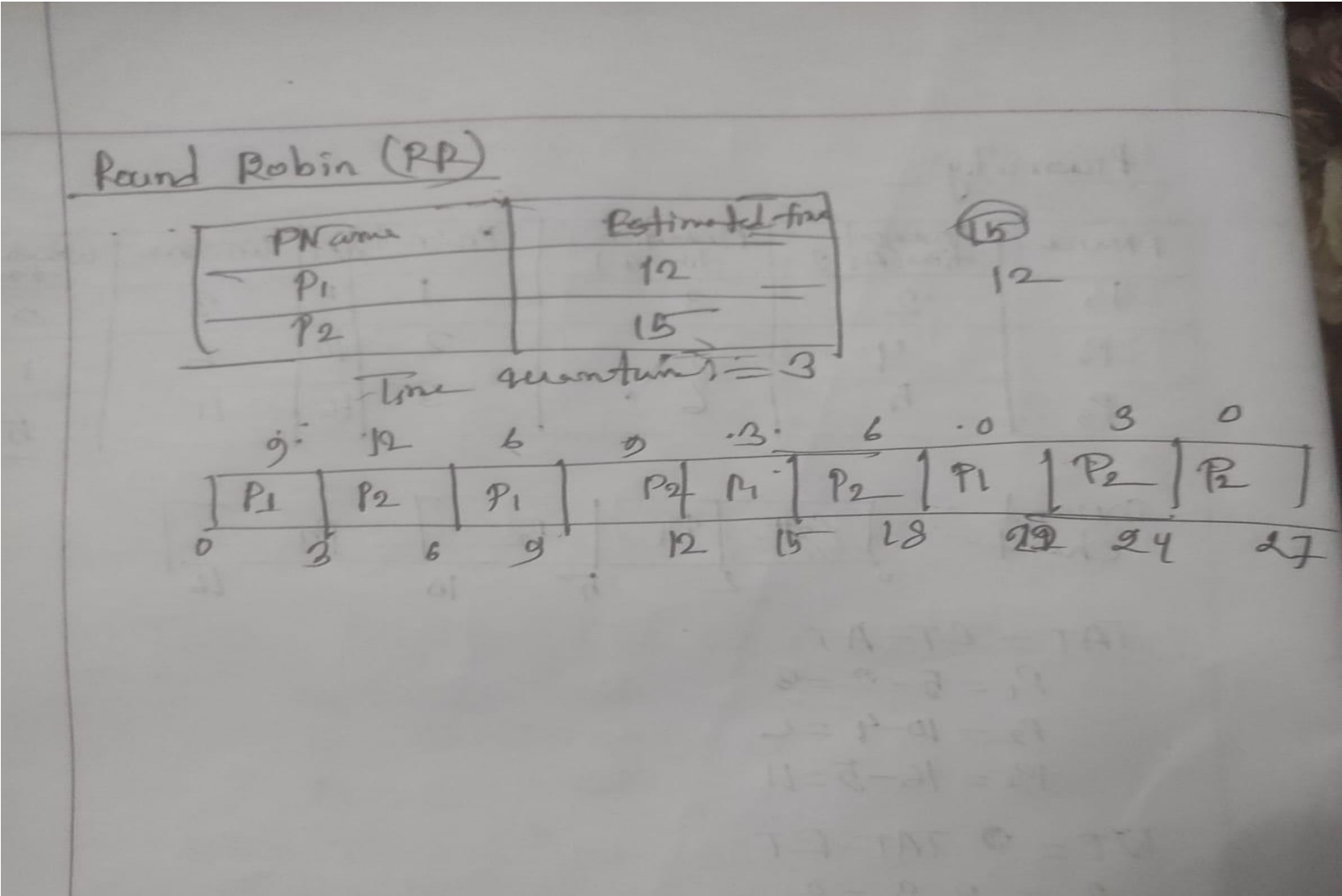
```

The terminal output shows the execution of a C program that simulates a process scheduling algorithm. The program takes 3 processes as input and outputs a table of process details and average waiting/turnaround times.

Pname	arrivaltime	executiontime	priority	waitingtime	tatime
p1	2	3	1	0	3
p2	4	5	2	1	6
p3	5	6	3	5	11

Average waiting time is:2.000000  
Average turnaroundtime is:6.666667~\$

Round Robin (RR)



Lab-6 - CoCalc

cocalc.com/projects/d0ffdd33-93e7-414c-b56b-5afe4dc4086d/files/2022-07-05-113319.term

ProjectsLab-6

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FilesNewLogFindSettingsProcesses2022-07-05-113319.term2022-07-05-113346.termChatPrivate

File–+PauseClipboardTerminal

```
~$ nano rr.c
~$ gcc rr.c -o rr
~$ ./rr
Enter the no of processes:2
Enter the time quantum:3
enter process name & estimated time:p1 12
enter process name & estimated time:p2 15
The processes are:process 1: p1
process 2: p2

p1 -> 3
p2 -> 3
p1 -> 3
p2 -> 3
p1 -> 3
p2 -> 3
p1 -> 3
p2 -> 3
p1 -> 3
p2 -> 3
Total Estimated Time:27~$
```