Write a program to compute best time quantum for RR algorithm. According to input you should minimize average waiting time or response time. Draw Gantt-chart for these parameters. For best q, compute Waiting time, Turnaround time, CPU Utilization, and Response Time.

Input File Format (P1.In):
First line of input file indicates Dispatcher Latency as an integer number.
Second line of input file indicates what the meaning of best. It is a single character ('W' means you should minimize Waiting time, and 'R' means you should minimize Response time).
Other lines of input files provide processes information. Each line indicates one process. All parameters separated by a ','. First parameter is process name (max 2 characters), after that arrival time of process, then burst times (start by CPU burst time). A zero will come at the end to show end of burst times.
Format:
Dispatcher-Latency
Process-Name (2Char), Arrival-Time, CPU-Burst-Time, IO-Burst-Time, CPU-Burst-Time, …. ,0
…
0

Output File Format (P1.Out):
Best time quantum is : value

Gant-Chart, i.e :

```
-------------------------------------------------------------
P1  | P2   | P1    | P3     | MN    | …
-------------------------------------------------------------
0    2       4       12       32
```

Average Waiting Time : value
Average Turnaround Time : value
CPU Utilization : value %
Average Response Time : value

Notes:

- You can use any method to show your Gantt-char, but you should write it down to an output file.
- Your program should not have any user interface, it should just read input file and write output file.
- Use only "P1.In" for input file name and "P1.Out" for output filename.

Good Luck

Parseh