Distributed systems

Lab8 Clock Synchronization

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Question 1: In term of NTP stratum is a distance a particular device is from a time source. It mean, if we will further away, time sync will be less accurate.

Question 2:

```
root@ubuntu:~# ntpq -p
     remote           refid      st t when poll reach   delay   offset  jitter
==============================================================================
ec2-52-15-244-1 3.17.153.224     16 u   12   64    3    0.325   -0.295   16.452
```

Remote: default the NTP server connected with.
Refid: refers to the NTP servers that the remote servers are connected to.
St: refers to a server's stratum, which refers to how close the server is from us
T: refers to the type, specifically whether the server is using unicast, broadcast, multicast, or manycast.
When: refers to how long ago it was since the last time the server was polled.
Poll: indicates how often the server will be polled.
Reach: If all eight are successful, this field will read 377.
Delay: in milliseconds.
Offset: refers to the delay in reaching the server, in milliseconds.
Jitter: refers to the network latency between your server and theirs

Question 3:
We don't know, when two events are concurrent. If two or more events happens at the same time, we have not idea how to check it.

https://github.com/slvt1/DS/blob/master/main.py
Output of program:

```
buldiga@buldiga:~$ /usr/bin/python3 /home/buldiga/homeworks/ds/lab8/main.py
Process a: [7, 6, 1]
Process b: [2, 8, 1]
Process c: [2, 8, 4]
```