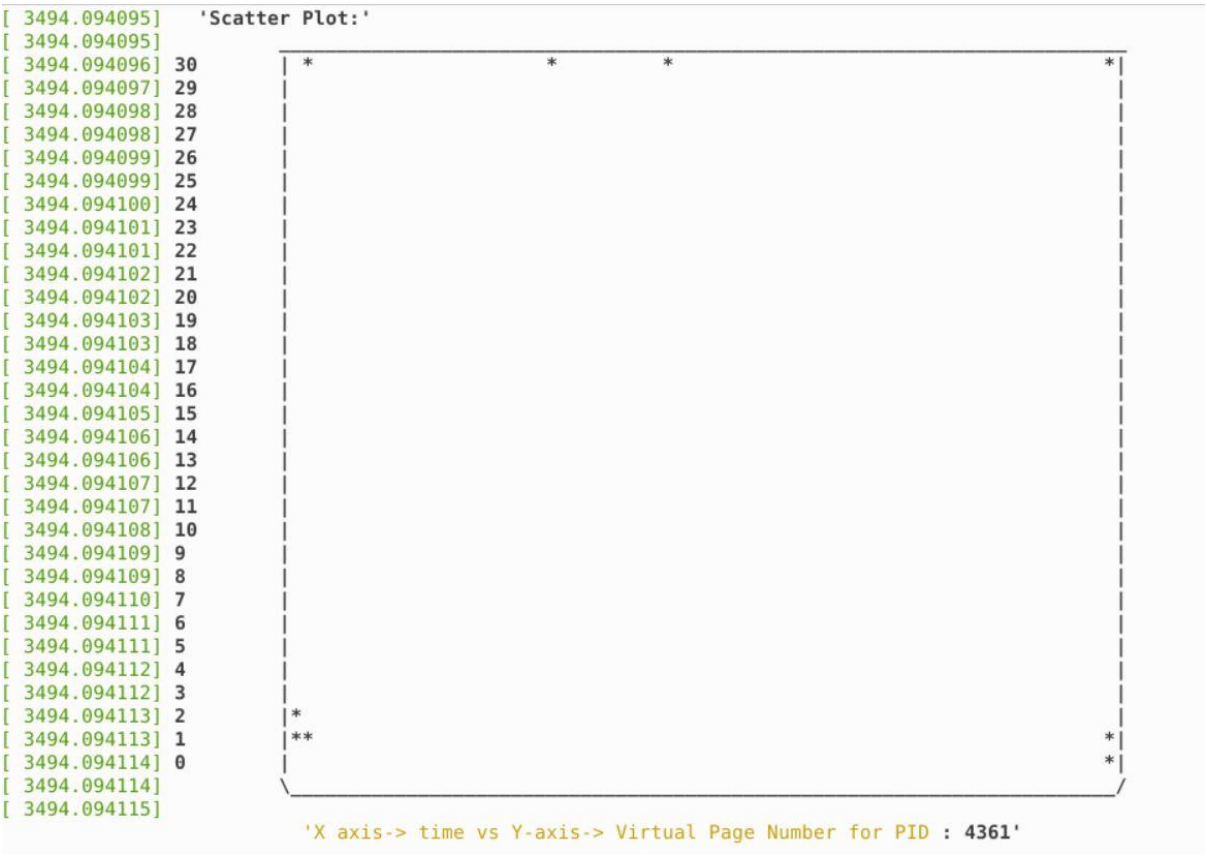
Results:

The x-axis represents time and y-axis represents virtual Page number.

X-axis goes from 0 to 30

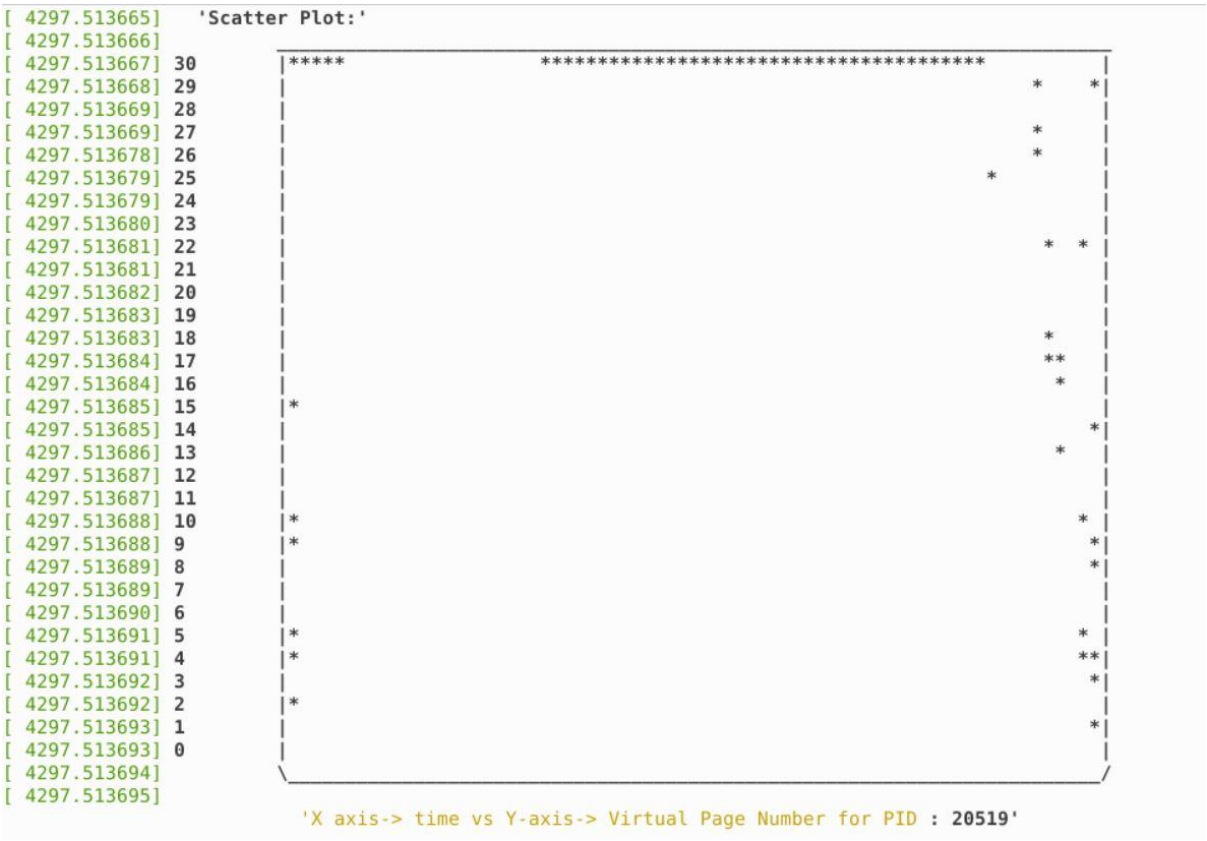
Y-axis goes from 0 to 70

1)Scatter Plot on Bash :



Used ps -l to get pid of bash.

2)Scatter Plot for Sysbench (compute intensive):



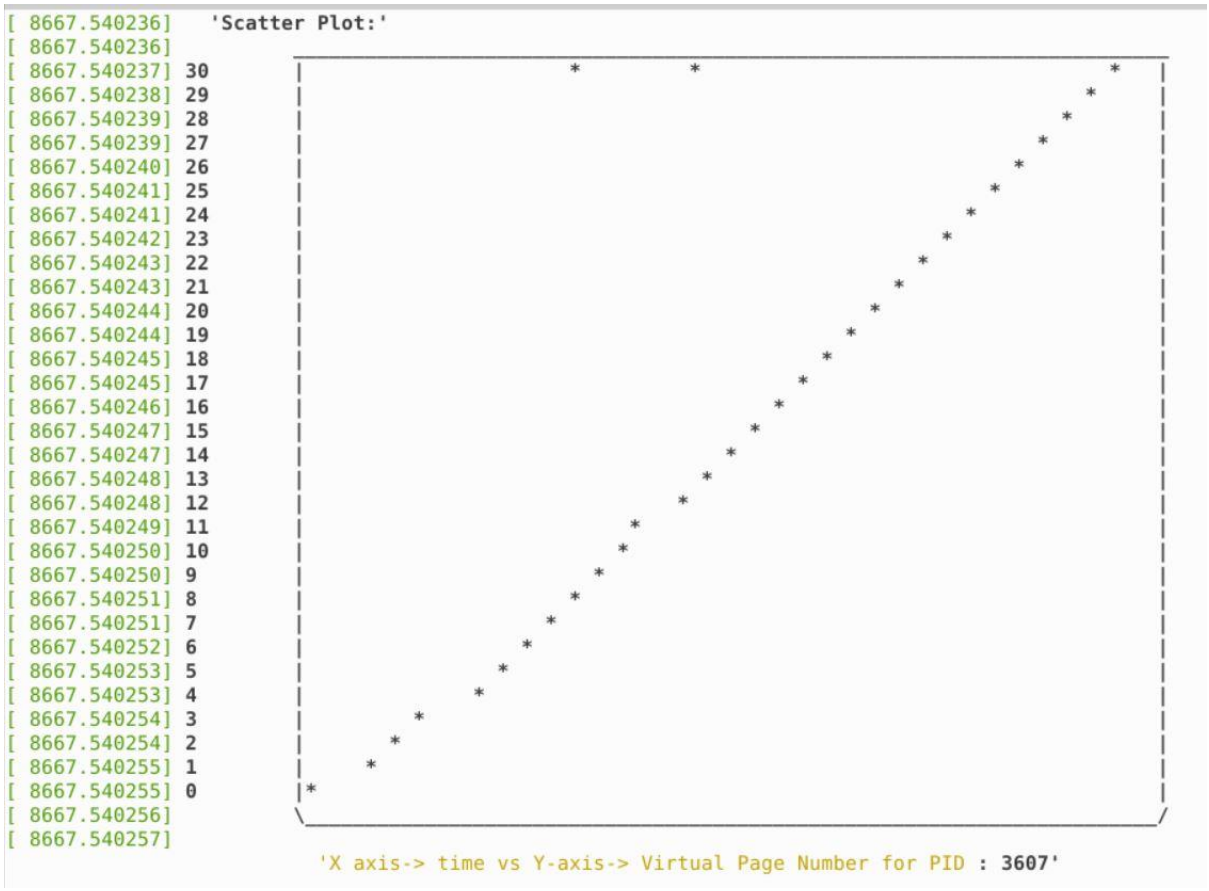
Steps:

1st terminal : sysbench –test=cpu –cpu-max-prime=20000 run & echo $! sleep 60

It displays the pid . Get that pid

2nd terminal: Use that pid for insmod before the process completes

3)Scatter Plot for Iperf (Network I/O intensive):



Steps :

1st terminal : iperf3 -s -p 2323

2nd terminal : ps -aux

Get pid of iperf

Insert kernel module (insmod)

3rd terminal : iperf3 -c 128.226.28.73 -p 2323 -f K

While running this(before it completes), immediately remove the module (rmmod) using 2nd terminal

Close 1st terminal server process

Conclusions:
We know how a page fault occurs.(during swapping since the virtual address cannot be modified during in-process)

We can say that the page faults appear majorly because of the cold start penalty.

In bash, we get the page faults nearly to the 4 corners.

In sysbench(which is compute intensive) , we get nearly to the ends/edges, but here we get more page faults since it is compute intensive.

However, in iperf(network intensive) , we get a linear scatter plot. Since, it is network intensive, page faults occur with time i.e when packets as passed over network.