

Lianming Wu  
CSC33200 OS  
Professor: Gordon

Note: If there is error saying connection refused, just kill the python3 process and restart the INIT.

## Assignment1

I used the TCP socket to achieve the IPC(inter-process-communication) as TCP is a safer way to transmit data than UDP as it checks if any data is lost during the process. Also, TCP have the advantage that it can connected to different IPs worldwide with just changing the IP address and port number, which the local pipe can't not achieve. Finally, this is more convenient than sharing memory as we don't need to care about the possible 'race conditions'.

I chose to use Python to implement this as python have a convenient socket library that is ready to use and most importantly the "list" data structure and those convenient split and join methods for strings. Which made splitting the string and access each sub-string and rejoin much easier.

I didn't create a class PCB to store the data as I would need to write a `__str__` method and convert the class object back to string. But the data is in perfect form initially, so the convert to object and converted back is not necessary although it could make later maintenance easier and provide clarity. (It returns type error when you try to directly send a PCB object)