Whats the oldest file in directory
- stat

How many different nsmes is fred.dat known as
-inode

Which is the largest file in directory
-stat size

If you find fork() statement in a piece of code what else must you find
-wait

What causes zombies? How do you prevent infestation?
-wait

Since processes run asynchronously due to the scheduler, what can be done to synchronize the execution of parent and child?

-depends on kernel sunce it decides which to run. To synchronize, simplest way, immediately after fork() do wait() so child will tinish first and nothing else will run ynder parent

If you have pause () then it pauses execution till a signal is caught. If there is no handler for a spcific signal then kernel will do default value.

How is pause() similar to waitpid()
- its going to stop execution of whatever process was running until an event happens that wakes them up. Same in waitpid parents wait till the pid process or a child process is finished

What is pause() call and what allows your code to continue after it is called
- tells kernel put this on shels until

something happens. That is a signal. Ehen an event happens then it wakes back up. If you log off while on pause then parent is done and the application is still running im background (child process) so it becomes zombie because it has no parent now

Whats main difference between Pipe and Fifo
- both unidirectional
- in bkg, pipe talk only process that belong to same user
- fifo allows unrelated processes to talk to each other

What happens when you have multiple processes writing into a Pipe vs into a fifo? How to fix this?
- pipe doesnt have block control. So multiple children can mess up the messag- fifo deals with file on disk, kernel will wait until the

whole block of data is written to disk properly.
- to fix this control how child is writing. So control which is writing. Or create new pipe for each children

What are major challenges of using shared memory
- array of bytes in memory, because there is some access control on shared memory. How do you control who writes when and at what block of memory

What are some of the advantages of using sockets over pipes
- processes need to be related in pipe
Anybody that has ip address on machine and has acces on the socket address anyone can access it

When are fifos more advantageous over

sockets?
- if you dont want the effort of creating firewall, if you want data to only be available for certain machines, dont wanna deal with all internet rtraffic. For security and privacy reasons.s if network goes down fifo still works.
- pipe and fifo on same machine so good