Containers

1. What is OS-level virtualization? OS-level as opposed to what other levels?
2. How does the isolation model for OS-level virtualization differ from that for process VMs and system VMs?
3. How do containers improve upon the isolation model for a (a) single process (b) chroot jail, (c) sandboxes?
4. What are some key system resources that are virtualized by containers?
5. (a) What are “containers”? (b) What type of virtualization do they provide? Explain.
6. What is meant by a “namespace” when referring to a process or a group of processes?
7. What are the different types of namespaces supported by Linux operating system?
8. What are “control groups” (also called cgroups) in Linux?
9. Linux containers contain consist of two main components: Namespaces and CGroups. Explain the role of each.
10. How does the isolation model of containers differ from traditional system VMs and process VMs?
11. What are jails or sandboxes?