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| **VIRTUAL MACHINES** | **CONTAINERS** |
| VM is piece of software that allows you to install other software inside of it so you basically control it virtually as opposed to installing the software directly on the computer. | While a container is a software that allows different functionalities of an application independently. |
| Applications running on VM system can run different OS. | While applications running in a container environment share a single OS. |
| VM virtualizes the computer system. | While containers virtualize the operating system only. |
| VM size is very large. | While the size of container is very light; i.e. a few megabytes. |
| VM takes minutes to run, due to large size. | While containers take a few seconds to run. |
| VM uses a lot of system memory. | While containers require very less memory. |
| VM is more secure. | While containers are less secure. |
| VM’s are useful when we require all of OS resources to run various applications | While containers are useful when we are required to maximise the running applications using minimal servers. |
| Examples of VM are: KVM, Xen, VMware. | While examples of containers are:RancherOS, PhotonOS, Containers by Docker. |