1. Lets say your organization has github and bitbucket to store code, you have cloned a repo onto your local and changed directory name. after some days one of your team members asks you to share clone link, how would you provide the same?

Git clone -v – will give the actual path from where that folder was fetched.

1. I have shell script to delete particular dependency ( repo is maven project ). before running the script i need to clone repo to my local, here point to note i should only clone master branch and only last commit ( last commit has all the code ) how would you do this?

Git clone -b master --single-branch --depth 1 {clone link}

1. what is submodule and why we need submodule?

Ans: A git submodule is **a record within a host git repository that points to a specific commit in another external repository**. Submodules are very static and only track specific commits. Submodules do not track git refs or branches and are not automatically updated when the host repository is updated.

Git submodules may look powerful or cool upfront, but for all the reasons above **it is a bad idea to share code using submodules, especially when the code changes frequently**. It will be much worse when you have more and more developers working on the same repos.

1. Lets say you have changed 5 files a,b,c,d and e in a repo and you did git add ., now all the files are in staging area, now i decided not to commit file d. how would delete it from staging area?

Git rm --cached d

**Maven**

1. what is multi module project in maven and what are the setting you want to do in multi module parent and child project? what is dependency management?

A multi-module project is **built from an aggregator POM that manages a group of submodules**. In most cases, the aggregator is located in the project's root directory and must have packaging of type pom. The submodules are regular Maven projects, and they can be built separately or through the aggregator POM

DependencyManagement: All the configurations and settings are stored here.

1. what is transitive dependency?

Means when A depends on B and B depends on C, then A depends on both B&C.

Transitivity brings a serious problem with different versions of the same artifacts are included by different dependencies.

So we can add exclusions in our pom.xml file.

**Jenkins**

1. Have you worked on commit based job in jenkins? what settings you need to do in jenkins and github to setup commit based job?

For commit based job, we must have webhook. Click on settings in github of your rpeo. Go to webhooks, Add webhook button will be there. We can place our payload url there and also we can select what all events if we want, or only push events and click on Add webhook. Now, create a job in Jenkins, select git and check the checkbox for Build triggers > Github hook trigger for Scm polling. Click on Save. Whenever there is any changes are there, Jenkins should trigger a job through github push.

1. you want to create 50 freestyle jobs with same configurations, but only change is job name. how would you achieve the same?

Using Groovy scripting and adding for loop using Script console.

1. How can you copy job from your local jenkins instance to other local jenkins instance?

Copy ~/.jenkins/jobs/web-hook/config.xml ---- cp -r . ../copy-1/

Manage Jenkins – Reload from disk – One more job will come

**Unix and Shell scripting**

1. write a script which accepts file or folder, if its folder delete it else print "this is a file"?

read input

echo “entered value is $input”

if [-d $input] ; then

rm -rf $input

elif [-f #input];then

echo “its file”

else

echo “file or directory not found”

fi

1. How to check whether particular port is already in use or not?

Netstat -tupln // -t for tcp, u for udp, -n for numeric value

1. Logic for checking whether supplied string for a script is palindrome or not? what are all the commands you will use?

Read palindrome

Reverse=$(echo $palidrome | rev)

If [ $palindrome = $reverse]; then

Echo “its palindrome”

Else

Echo “its not palindrome”

fi

1. command to get number of lines in a file?

Cat filename | wc -l

**Ansible**

1. Lets say i have 4 machines consider 1 as ansible master other 3 as nodes, what are the basic setup you need to do for ansible cluster?

Master should be linux, unix machine and nodes could be anything.

Create ssh key and copy key on all the nodes

Ssh connectivity should be there.

/etc/ssh/sshd\_config

1. what are ansible roles? why we need ansible roles? have you worked on ansible galaxy?
2. What are ansible facts?
3. Can we have windows machine as ansible master? as node?have you worked on any windows modules? can you list few?any extra configuration do we need to do?

**Docker**

1. Have you worked on multi-stage dockerfile and why we need that?

We can reduce image size by doing that. Also, first stage once completed, gets cached.

1. Lets say i have container which is attached with a volume, if container crashes what happens to volume?

Volume wont be deleted in this case,

Docker run -it -v data-volume:/data busybox /bin/sh

1. can you copy a file form local to run container?

Docker cp filename containerid:/

**Kubernetes**

1. what is init container and side-car container?can you give simple scenario where we use these conatiners?

Init-contianers: It executes before application container executes, also they they don’t executes always. When its success, they exits themselves.

Side-car containers: Kind of helpers to main containers, sidecar containers are a relatively advanced use case, and shouldn’t be deployed casually or without reason, as they increase the complexity of your cluster. That said, there are many ways that sidecar containers can enhance the functionality of the main container, and, in this section, we’ll discuss several of the most common uses. The two containers share resources like pod storage, volumes and network interfaces.

1. which one is default deployment strategy? how it works?

Rolling update is the default.

1. command to check the container logs in pod?

Kubectl log podname

what are the types of services present in kubernetes?

Cluster

Load Balancer

Nodeport

1. What is the link between pod and service?

Ans: Label (pod) and Selector (service )should match on them, else it would be difficult for service