1. What is Jenkins?

Jenkins is a DevOps tool used to automate building and deploying software from a SCM.

2. How do you store credentials in Jenkins securely?

Jenkins has a Credential management screen that allows you to create and store private keys. Secret texts, username and passwords, ssh usernames and certificates.

3. What is Continuous Integration

The process of adding new feature or bug fixes to a production environment in a safe and controlled way.

4. What is git cherry-pick? What are the scenarios in which git cherry-pick can be used?

Cherry pick is how you can pick specific commits to go into a different branch than it was committed to. Its uses could be used for testing or troubleshooting purposes. Also could be just to test how certain commits react to other commits. Or to add certain features to other branches.

5. How can you set up a Jenkins job?

1. From the dashboard view click “new item”
2. Give the job a name
3. Select from the options available.
4. Then enter a description
5. Select a SCM
6. Add built triggers
7. Select a build environment
8. Add build steps
9. Add any post build actions.

6. How can you create and assign roles in Jenkins?

1. First make sure the roles add on is installed
2. Then go to manage jenkins
3. Then manage and assign roles
4. Manage roles
5. Create a name.
6. Assign the different permissions
7. Navigate back and go into assign roles
8. Add a user/group. Must match the name of the user if you are adding a user
9. Then select the new role on the user that was just added or was already there.

7. What is the difference between git checkout [branch name] and git checkout -b [branch name]?

Git checkout just “logs” you into the branch that was already created before.

Git checkout -b creates and logs you into a new branch.

8. What is the difference between cherry-pick and pull request?

Cherry pick only adds a commit from one branch to the other

A pull request will merge 2 whole branches together no matter how many commits they have

9. How to install a plugin in Jenkins?

1. Click manage jenkins
2. Click manage plugins
3. Click the available tab
4. Search for the plugin you want
5. Select the check boxes of the plug ins you want.
6. Select install without restart.

10. What is agent and how to create agent?

An agent is like a server but for operating hardware

To create one:

1. Under manage jenkins
2. Click on manage nodes and clouds
3. Click on new node
4. Give it a name and select permanent agent
5. Select create
6. Fill out all the necessary information
7. Click save.
8. Navigate back to manage nodes and clouds
9. Click on the new created agent
10. Click the launch button to start it or use the instructions to launch it on the CLI