**JENKINS QSTNS**

**What’s the difference between continuous integration, continuous delivery, and continuous deployment?**

**Benefits of CI/CD**

**What is meant by CI-CD?**

**What is Jenkins Pipeline?**

**How do you configure the job in Jenkins?**

**Where do you find errors in Jenkins?**

**In Jenkins how can you find log files?**

**Jenkins workflow and write a script for this workflow?**

**How to create continuous deployment in Jenkins?**

**How build job in Jenkins?**

**Why we use pipeline in Jenkins?**

**Is Only Jenkins enough for automation?**

**How will you handle secrets?**

**Explain diff stages in CI-CD setup**

**Name some of the plugins in Jenkin?**

1. Continuous integration is part of both continuous delivery and continuous deployment. And continuous deployment is like continuous delivery, except that releases happen automatically.
2. Benefits of CI/CD – Higher efficiency, reduced risk of defects, Faster product delivery, Log generation, Quick rollback if required, Efficient testing & monitoring etc.
3. Continuous integration and continuous deployment (CI/CD) is a set of ideas, processes, and capabilities that enables software changes to be delivered to users in a timely, repeatable, and secure manner by introducing automation into software development processes.
4. Jenkins Pipeline is a suite of plugins which supports implementing and integrating continuous delivery pipelines into Jenkins. A continuous delivery pipeline is an automated expression of your process for getting software from version control right through to your users and customers.
5. When we create a new job, we get a configuration option where we can write the description, building triggers, giving credentials if required and various other options are available.
6. In Jenkins, in the pipeline where failure occurred, in the pane, select the latest build, and click Console Output. On the Console Output page, check the logs to find the reason for the failure. If required, update the parameters in the deployment input configuration file.
7. Log files should be at /var/log/jenkins/jenkins. Jenkins uses java.util.logging for logging. The java.util.logging system by default sends every log above INFO to stdout.Jenkins is equipped with a GUI for configuring/collecting/reporting log records of your choosing. This page shows you how to do this.First, select the "System Log" from the "Manage Jenkins" page.
8. Jenkins is an open-source automation tool with a powerful plugin architecture that helps development teams automate their software lifecycle.
9. Step 1: Go to the Jenkins Dashboard and select New Item.

Step 2: Give the Item name and choose Freestyle project option. Here I have given the item name "demo".Click on OK button.

Step 3: In this example, we are keeping it simple and just using to print HelloWorld.

Select the Git option and enter the GitHub repository of your HelloWorld program in the Repository URL section.

Step 4: Select the Execute Windows batch command option from the add build step button and give the command to run your java program.

Step 5: Click on Apply then Save button.

So our project demo is now created. You can check a build to see if the build is successfully created or not. To check a build, click on the Build Now option.

1. In the Jenkins dashboard, click on new item to create a new job.
2. Jenkins pipeline allows us to define a complete list of events that happen in the code lifecycle. Starting from the build, to testing and deployment. We can use a set of plugins that help in the implementation of certain processes as a continuous delivery pipeline.
3. While Jenkins is a great Continuous Integration tool, it was simply not built for Continuous Delivery purposes. With this said, there are better tools than Jenkins that can help you automate and modernize CD processes and offer other benefits too.
4. The easiest way to store secrets is to store them in a field of the type Secret, and access that field in your other code via a getter that returns the same type. Jenkins will transparently handle the encryption and decryption for on-disk storage.
5. The 7 essential stages of a CI/CD pipeline

The trigger.

Code checkout.

Compile the code.

Run unit tests.

Package the code.

Run acceptance tests.

Delivery or Deployment.

1. Add Changes to Build Changelog. CodeThreat. DevOps Portal. CatLight Notification. Qualys IaC Security. Pipeline Input Step Notification. BeVigil CI. Matomo analytics. Deploy to webMethods Integration Server, Docker Plugin, GitHub Integration, Mailer etc.