

TASK 2: Create a Simple Jenkins Pipeline for CI/CD

- **Objective:** Set up a basic Jenkins pipeline to automate the process of building and deploying an application.
- **Tools:** Jenkins, Docker
- **Deliverables:** A Jenkins pipeline file (Jenkinsfile) to build and deploy an app.
- **Hints:**
 - a. Install Jenkins (or use a cloud instance).
 - b. Create a Jenkinsfile in your project repo with steps to build and deploy the app.
 - c. Configure Jenkins to trigger the pipeline on each code commit.
 - d. Add stages like build, test, and deploy.
 - e. Test the pipeline by pushing changes and checking the Jenkins dashboard.
- **Outcome:** You'll learn how to automate the deployment process with Jenkins in a DevOps pipeline.

Interview Questions:

1. What is Jenkins, and how is it used in CI/CD?
2. What is a Jenkinsfile?
3. How do you create and configure Jenkins pipelines?
4. What are some common stages in a Jenkins pipeline?
5. What is the difference between a declarative and scripted Jenkins pipeline?

📌 Task Submission Guidelines

- 🕒 **Time Window:**

You can complete the task anytime between 10:00 AM to 10:00 PM on the given day. Submission link closes at 10 :00 PM

- 🔍 **Self-Research Allowed:**

You are free to explore, Google, or refer to tutorials to understand concepts and complete the task effectively.

- 🔧 **Debug Yourself:**

Try to resolve all errors by yourself. This helps you learn problem-solving and ensures you don't face the same issues in future tasks.

- 💰 **No Paid Tools:**

If the task involves any paid software/tools, do not purchase anything. Just learn the process or find free alternatives.

- 📁 **GitHub Submission:**

Create a new GitHub repository for each task.

Add everything you used for the task — code, datasets, screenshots (if any), and a short README.md explaining what you did.

📌 **Submit Here:**

After completing the task, paste your GitHub repo link and submit it using the link below:

- 👉 [[Submission Link](#)]

Best
of
Luck

