Q1. Build a manual ci-cd pipeline for a java application and also write a simple test.sh for testing , after that convert the same in automated ci-cd pipeline using jenkins but you have to also use maven for java application.

MANUAL CI-CD PIPELINE:

A manual CI/CD (Continuous Integration/Continuous Deployment) pipeline is a software development process that involves manually performing various stages of the CI/CD pipeline instead of using automated tools.

MAVEN:

Maven is a popular build automation tool primarily used for Java projects. It provides a way to manage a project's build, dependencies, and documentation. Maven uses a Project Object Model (POM) to manage a project's configuration, which defines the project's dependencies, build settings, and plugins.

Manual CI/CD Pipeline for Java Application

Step 1: Set up Git repository

Step 2: Write code and commit changes

Step 3: Build the application

Step 4: Create a test.sh file

Step 5: Test the application

Step 6: Deploy the application

Automated CI/CD Pipeline for Java Application using Jenkins and Maven

Step 1: Set up Git repository

Step 2: Set up Jenkins

Step 3: Create a Jenkins project

Step 4: Set up the build environment

Step 5: Configure the build process

Step 6: Create a test.sh file

Step 7: Set up testing in Jenkins

Step 8: Deploy the application

By following these steps, you can create a fully automated CI/CD pipeline for your Java application using Jenkins and Maven