# Jenkins Installation & Debug Issue - KodeKloud Task 1

## Steps to Complete the Task

1. Access the Jenkins Server

- SSH into the jump host using provided credentials.

- SSH from the jump host to the Jenkins server using the root user and password.

2. Install Jenkins on the Server

- Update the system: `yum update -y`

- Add the Jenkins repository:

```

yum install -y wget

wget -O /etc/yum.repos.d/jenkins.repo https://pkg.jenkins.io/redhat-stable/jenkins.repo

rpm --import https://pkg.jenkins.io/redhat-stable/jenkins.io.key

```

- Install Java: `yum install -y java-11-openjdk`(if you get any error then install java-17-openjdk

- Install Jenkins: `yum install -y jenkins`

- Start and enable Jenkins:

```

systemctl start jenkins

systemctl enable jenkins

```

3. Debugging Jenkins Service Issues

- Check the Jenkins service status: `systemctl status jenkins.service`

- Review logs for details: `journalctl -xeu jenkins.service`

- Common issues and fixes:

- Missing Java: Install Java 11.

- Port conflicts: Ensure port 8080 is free, or change Jenkins' default port.

- SELinux blocking Jenkins: Set SELinux to permissive mode.

- Permissions: Ensure Jenkins directories have correct ownership.

4. Access Jenkins UI

- Navigate to http://<jenkins-server-ip>:8080 in a browser.

- Copy the initial admin password from `/var/lib/jenkins/secrets/initialAdminPassword`.

- Follow the on-screen instructions to complete the setup.

5. Create the Admin User

- Username: theadmin

- Password: Adm!n321

- Full Name: John

- Email: john@jenkins.stratos.xfusioncorp.com

6. Verify Jenkins Installation

- Ensure the service is running: `systemctl status jenkins`.

- Test by running a sample job in Jenkins.