

Ques 1. List 5 Linux distros other than what has been mentioned here and state one feature that make them unique.

- **Gentoo** features a rolling release model. It allows users to have great control over the services installed and running on their computer. They can immensely customize and optimize their system.
- **CloudLinux** stands out for improving server stability, density, and security. It is targeted to shared hosting providers and data centers.
- **Elementary OS** aims to be a fast, open, and privacy-respecting alternative to Windows and MacOS. It features a pay-what-you-want (PWYW) model.
- **Manjaro** features a rolling release model. Its simplicity, stability and performance make it a suitable alternative OS to MacOS and Windows. It offers multiple desktop environments.
- **Lubuntu** stands out for being lightweight, fast, and offering great compatibility with many formats and applications. Besides, it offers a Software Center with many free apps that can be safely downloaded.

Ques 2. From the example given in class, list the DevOps tools you know and match them to the DevOps stages - refer to the DevOps lifecycle diagram

- **Plan:** Trello, Asana
- **Code:** GitLab, Bitbucket
- **Build:** Travis CI, CircleCI
- **Test:** JUnit, TestNG
- **Release:** GitLab CI/CD, Azure DevOps
- **Deploy:** Kubernetes, OpenShift
- **Operate:** Puppet, Chef
- **Monitor:** Prometheus, Grafana

Ques 3. DevOps helps speed up software delivery and helps to push our software product to market at a very high velocity while still maintaining quality and reliability, How does it achieve that?

- DevOps achieves this by fostering collaboration between development and operations, automating manual processes, and implementing continuous integration and deployment pipelines to ensure rapid, iterative development with a focus on quality and reliability.

Ques 4. What is a CICD Pipeline?

- A CI/CD (Continuous Integration/Continuous Deployment) pipeline is an automated process that enables developers to consistently and efficiently build, test, and deploy software changes to production, ensuring a streamlined and reliable software delivery lifecycle.