**What is Jenkins?**  
Jenkins is an open-source automation tool used to build, test, and deploy software automatically.

**Purpose:**  
It helps developers find and fix bugs quickly, and automate repetitive tasks.

**Key Feature - CI/CD:**  
Jenkins is widely used for **Continuous Integration (CI)** and **Continuous Deployment (CD)**.

* **CI:** Automatically tests code when developers make changes.
* **CD:** Automatically deploys the tested code to production.

**How It Works:**

* Developers push code to a repository (like GitHub).
* Jenkins detects the change.
* It automatically runs tests and builds the project.
* If successful, it deploys the code.

**Plugins:**  
Jenkins has over 1,800 plugins to support tools like Git, Docker, Maven, AWS, etc.

**Easy to Use:**  
Jenkins has a web interface where you can create jobs (automated tasks) without much coding.

**Cross-Platform:**  
It works on Windows, Linux, and macOS.

**Pipeline:**  
Jenkins Pipelines allow you to define the entire automation process using code (usually written in Groovy).

**Free and Open-Source:**  
Anyone can download and modify Jenkins without paying.

**Popular in DevOps:**  
Jenkins is a key tool in DevOps because it speeds up software development and delivery.