

What is an Application Server?

An Application Server is a software framework (or a server) that runs and manages applications.

☞ It provides the environment where your application code can run.

☞ It also handles business logic (rules of your application) and communicates between the frontend (user interface) and the backend (database).

Main Functions of an Application Server:

1. Runs application code – Executes Java, .NET, Python, PHP, etc.
2. Manages requests – Accepts requests from users (through a web server) and processes them.
3. Connects to databases – Retrieves and updates data.
4. Provides security – Authentication, authorization, and encryption.
5. Scalability – Can handle many users at the same time.

Examples of Application Servers:

- Apache Tomcat (Java apps)
- JBoss / WildFly
- WebLogic (Oracle)
- WebSphere (IBM)
- Microsoft IIS (for .NET apps)

Example:

- A Web Server (like Apache or Nginx) shows static content (HTML, CSS, images).
- An Application Server runs the logic (like login, shopping cart, payments).