### 1. What is Spring?

Spring is a Java framework used to build web apps, APIs, and enterprise software. It helps developers build code that's easy to test and maintain.

Example: You can use Spring to create a REST API for a to-do list app.

## 2. What is Spring Boot?

Spring Boot is a tool that makes it easier and faster to build Spring apps. It gives you pre-configured settings, so you don't have to set up everything manually.

Example: Instead of configuring a web server or database manually, Spring Boot does it for you with just a few lines of code.

#### 3. What is the relation between Spring platform and Spring Boot?

Spring Boot is a part of the Spring platform. It's like a helper that simplifies the setup and running of Spring applications.

Example: Spring gives you tools. Spring Boot gives you a toolbox ready to go.

## 4. What is the relation between Spring platform and Spring framework?

The Spring platform is the overall ecosystem, and the Spring framework is the core part of it — providing the main features like Dependency Injection, AOP, ....

Example: Spring platform = full toolkit; Spring framework = the base tools inside it

# 5. What is Dependency Injection and how is it done in the Spring platform/framework?

Dependency Injection is when objects are given their dependencies (like services or repositories) instead of creating them themselves.

In Spring, this is done using @Autowired.

#### 6. What is Inversion of Control (IoC) and how is it related to Spring?

Inversion of Control means the framework (Spring) controls how objects are created and connected — not you. Spring manages the object lifecycle through the IoC container.