

**What is Spring?** Spring is a framework designed to combine many different technologies in natural ways. It provides a consistent programming model that allows us to integrate different technologies to meet the project's needs easily.

For example, Spring makes it easy to interact with databases through its JDBC without any underlying specifics.

**What is Spring Boot?** It is an open-source Java framework that makes creating and running Java microservice applications easier. It handles the configuration and setup process, allowing us to focus more on the application code.

For example, Spring Boot helps us avoid boilerplate code by writing code for starting a web server.

**What is the relation between the Spring platform and Spring Boot?**

Spring Boot is a module of the Spring framework; it builds on top of the Spring framework and adds its utilities. So, it can be said that Spring Boot simplifies the use of the spring framework.

**What is the relation between Spring platform and Spring framework?**

Spring framework is the foundation for having different functionalities like dependency injection, AOP, and web development, and the Spring platform is a broader concept encompassing the Spring framework and other projects.

**What is Dependency Injection, and how is it done in the Spring platform/framework?**

Dependency injection is a design pattern that involves providing an object to other objects that need to work with it instead of having the object created on its own. This can be achieved using constructor injection or setter injection. To implement dependency injection, we annotate the objects we want to inject as beans in the Spring container and declare their dependencies. The Spring container then injects these dependencies when it creates the bean.

**What is Inversion of Control (IoC), and how is it related to Spring?**

IoC is all about transferring object control to a container. It enables the framework to take control of the object's invocation, not the other way around. The relation to the Spring framework is that the framework uses the concept of inversion of control, letting us focus on the application logic and taking responsibility for object creation and dependency management.