



Section 1 - What is Spring and Spring boot?

what is spring boot?

 Here spring stands for spring framework and boot is something like bootstrap.

 Imagine you want to build a **Java web application**. Normally, setting up everything—connecting to a database, handling security, and managing configurations—takes a lot of time and effort.

 **Spring Boot** makes this process much easier!

◆ **Think of Spring Boot like an automatic setup tool for Java applications.** It takes care of the boring stuff so you can focus on writing your actual business logic.

 **Definition:**

Spring boot makes it easy for us to make stand alone production ready applications. That you can just run.



Lets understand it with an analogy:

⚡ Lets say that you want to open a coffee shop ☕

💠 In a **regular Java Spring app**, you would have to:

- Find a shop location (set up a web server)
- Hire workers (configure dependencies)
- Get a menu ready (write lots of configurations)
- Advertise your shop (connect APIs, security, databases, etc.)

💠 With **Spring Boot**, it's like buying a **franchise**! Everything is pre-setup ✅

- The shop is ready 📍
- The workers are already trained 👨‍🍳
- The menu is designed 📖
- You just **start selling coffee** (writing your main logic)

🌱 What is spring then?

🌱 Spring is a powerful framework that helps Java developers build applications easily.

🌱 **Spring** is a **framework** that helps manage Java objects and dependencies easily.



Spring Boot is an **extension of Spring** that makes building applications **faster and simpler** with auto-configuration.

Summarizing:

1 Spring (Framework) = Smart Assistant 🤖

- Helps manage Java objects automatically.
- Handles dependencies, transactions, and security.
- But **you still need to configure** everything manually (like setting up a web server, connecting databases, etc.).

2 Spring Boot = Spring + Auto-Configuration 🚀

- It **auto-configures** everything (no manual setup required).
- Comes with an **embedded web server** (Tomcat, Jetty, etc.).
- Allows you to **quickly build applications** with less code.