1. Spring: Spring is a powerful Java framework that provides comprehensive infrastructure support for developing Java applications. It offers various modules for different functionalities like dependency injection, aspect-oriented programming, data access, transaction management, etc.

2. Spring Boot: Spring Boot is an extension of the Spring framework that simplifies the process of building stand-alone, production-grade Spring-based applications. It provides auto-configuration and convention-over-configuration features, reducing the need for manual configuration.

3. Relation between Spring platform and Spring Boot: Spring Boot is built on top of the Spring platform. While Spring provides various modules for specific functionalities, Spring Boot simplifies the setup and configuration of Spring applications by providing defaults and auto-configurations, thus enhancing productivity.

4. Relation between Spring platform and Spring framework: The Spring framework is the core of the Spring platform. It provides the foundation for building Java applications, offering features like dependency injection, aspect-oriented programming, transaction management, and more.

5. Dependency Injection (DI): Dependency Injection is a design pattern used to create loosely coupled components in software applications. In the Spring framework, DI is achieved through IoC containers. Spring manages object dependencies and injects them into the dependent objects, reducing coupling and enhancing modularity.

6. Inversion of Control (IoC): IoC is a design principle where the control of object creation and lifecycle is inverted from the application code to an external container or framework. In Spring, IoC is achieved through the IoC container, which manages the lifecycle of objects and their dependencies, allowing for easier management, testing, and scalability of applications.