6. Highlight the benefits of using spring and what subprojects do you know?(2 marks)

ANSWER:

Spring Framework is a powerful lightweight application development framework used for Enterprise Java (JEE).

Below are some of its features:

- 1. **Spring is non invasive:** That means you no need to implements any interface or inherit any class from spring to your classes, so whenever you want to change from spring to any other technology then you no need to change the logics of your class.
- 2. **Spring is lightweight:** Spring is vast framework so spring people divide the whole spring in to different modules, they are designed in such a way that no module is dependent to other module , except Spring core module, so according to your requirement you can learn a particular module, you no need to learn whole total framework
- 3. **End to end Development :** Spring supports all aspects of application development, Business aspects, persistence aspects, etc, so we can develop a complete application using spring.
- 4. **Spring supports All types of application development:** We can develop any type of applications using spring, eg: Core java, web Application, Distributed application, Enterprise application.
- 5. **Spring is versatile:** We can integrate any technologies with spring , so we can say spring is versatile,
- 6. **Spring supports dependency injection:** The dependency between classes are managed by spring.

It provides different modules to achieve different services and functionality for development of application , some popular modules are

- Spring core.(Base module)
- Spring JDBC(for persistence logic)
- Spring AOP(for cross context logic)
- Spring Transaction(For transaction support)
- Spring ORM.
- Spring MVC(Web aspect)