Short Answer:

Answer the following questions with complete sentences in your own words. You are encouraged to conduct your own research online or through other methods before answering the questions. If you research online, please consult multiple sources before you write down your answers. You are expected to be able to explain your answers in detail

1. What is Maven and why it is used?
2. What is POM? And what information does POM contain?
3. What is Maven Repository? What is Maven Central Repository? What is local Maven Repository?
4. What is JAR and WAR? What are the differences?
5. What is Dependency Injection?
6. What is the difference between BeanFactory and ApplicationContext in Spring?
7. How Can We Inject Beans in Spring?
8. Which Is the Best Way of Injecting Beans and Why?
9. What is the Scope of a Bean?
10. How Does the Scope Prototype Work?
11. What Does the Spring Bean Lifecycle Look Like?

Coding Questions:

Write code in Java to solve following problems. Please write your own answers. You are highly encouraged to present more than one way to answer the questions. Please follow best practice when you write the code so that it would be easily readable, maintainable, and efficient. Clearly state your assumptions if you have any. You may discuss with others on the questions, but please write your own code.

1. Use both XML configuration and Annotation Configuration to complete following requirement (Two different projects)
   A. Create a Coach interface with a method getDailyWorkOutSchedule().
   B. Create three implementation for the Coach interface
   • Tennis — Print a string message of the schedule
   • Golf — Print a string message of the schedule
   • FootBall — Print a string message of the schedule
   C. Create a Player class which needs all of three different coaches.
   • For tennis coach, use Constructor Injection
   • For Golf coach, use setter Injection
   • For Football coach, use flied injection
   D. For Tennis coach:
   • Create a file which contains different schedule for Monday to Friday (In total, 5 different schedules)
   • Use post-initialization call back to load all 5 schedule into an Array
   • When getDailyWorkOutSchedule() get called, return random one from the array.

Note:
1. When using XML, since it doesn't support Field Injection, Football coach can be injected using setter.
2. When using Annotation, there should be no xml configuration of the bean.