**What is IOC?**

Inversion of Control (IoC) is a design principle that allows classes to be loosely coupled and, therefore, easier to test and maintain. IoC refers to transferring the control of objects and their dependencies from the main program to a container or framework.

**What is dependency injection?**

Dependency injection is a technique that allows objects to be separated from the objects they depend upon. Dependency Injection pattern will change binding on Objects at Compile time to Run time. Hence, we can reusable the class more than before. Unit testing also easy to perform.

There are three forms of Dependency Injection:

1.Constructor Injection

2.Setter Injection

3.Interface Injection

**What is Auto wiring?**

Auto wiring feature of spring framework enables you to inject the object dependency implicitly. It internally uses setter or constructor injection. Auto wiring can't be used to inject primitive and string values. It works with reference only.

**Difference between POJO** **and bean.**

POJO: If the class can be executed with underlying JDK, without any other external third party libraries support then its called POJO.

JavaBean: If class only contains attributes with accessors(setters and getters) those are called JavaBeans. Java beans generally will not contain any business logic rather those are used for holding some data in it.

All JavaBeans are POJOs but all POJO are not JavaBeans

**Difference between jar and war.**

A JAR file extension is .jar and is created with jar command from command prompt (like javac command is executed). Generally, a JAR file contains Java related resources like libraries, classes etc.JAR file is like winzip file except that Jar files are platform independent.

A WAR file is simply a JAR file but contains only Web related Java files like Servlets, JSP, HTML.

To execute a WAR file, a Web server or Web container is required, for example, Tomcat or Weblogic or Websphere. To execute a JAR file, simple JDK is enough.

War : Working on browser

Jar : Working on machine

**What is Maven and Gradle?**

Maven, or [Apache Maven](https://www.educative.io/blog/apache-maven-tutorial), is an XML-based build tool and project manager. Maven is an Apache open-source project. Its default repository is the Maven Central Repository. Maven projects are primarily defined by [Project Object Model (POM)](https://www.educative.io/blog/apache-maven-tutorial#pom) files written in XML. These POM.xml files contain the project’s dependencies, plugins, properties, and configuration data. Maven uses a declarative approach and has a predefined life cycle.

Gradle was built on Maven’s concepts, introduced as Maven’s successor. It was designed with multi-project builds in mind. Gradle’s build script is inherently more versatile and powerful than Maven’s. This is because Gradle is based on a programming language (Groovy), while Maven’s is based on a markup language (XML).