

Exercise 1 (30 Questions)

1. In the late 90s, Java became a hot buzzword in IT industry. Which of the following technologies in Java contributed to this the most?

(a) Java graphics (b) Java servlets (c) Java applets
(d) Java networking
2. JavaScript is a simplified version of Java.

(a) true (b) false
3. Which of the following is the original name of JavaScript?

(a) NetScript (b) MagicScript (c) PowerScript (d) LiveScript
4. Is JavaScript an interpreted programming language or a compiled programming language?

(a) interpreted (b) compiled
5. Are the Apache HTTP server and the Tomcat server essentially the same server?

(a) yes (b) no
6. Is it true that for a Java web application, the web server and the database server must stay in the same machine?

(a) yes (b) no
7. The Tomcat server evolved to become a solid production server.

(a) true (b) false
8. In which of the following tiers do we write our Java programs to implement our business logic?

(a) the presentation tier (b) the middle tier (c) the database access tier

9. Which of the following should not access the database?
- (a) client-side JavaScript (b) server-side programs
10. Is it possible that an HTTP response object contains binary data?
- (a) yes (b) no
11. Which of the following folders is the deployment directory of Tomcat?
- (a) `htdocs` (b) `webapps` (c) `webdir` (d) `webdocs`
12. Which of the following file types can be used to deploy Java web applications?
- (a) `.zip` (b) `.rar` (c) `.jar` (d) `.war`
13. Which of the following directories is required in a Java web applications?
- (a) `css` (b) `js` (c) `images` (d) `WEB-INF`
14. Which of the following types of Java files *must* be included in the directory `WEB-INF/classes`
- (a) the Java class files (b) the Java source files
15. It is possible to access the resources inside the directory `WEB-INF` internally within the Java web application.
- (a) true (b) false
16. Two Java web applications deployed on the same server act as if they were deployed on separate servers.
- (a) true (b) false
17. The only way to configure a Java servlet is to configure it *explicitly* inside the `web.xml` file.
- (a) true (b) false

18. It is possible to use the WinZip software to open the JAR files and WAR files.
- (a) true (b) false
19. The Eclipse IDE compiles the Java source files automatically.
- (a) true (b) false
20. The welcome file of a Java web application must be a physical file.
- (a) true (b) false
21. A Java web application needs to provide services to many users concurrently. Therefore a Java servlet in this web application needs to generate many instances to handle the requests from those different users.
- (a) true (b) false
22. It is required that each servlet can only have one URL pattern.
- (a) true (b) false
23. The tools that process Java annotations can only process those annotation lines inside the Java source files, not in the compiled Java class files.
- (a) true (b) false
24. Every time you change a Java annotation in a source file, the file has to be recompiled to get the change updated.
- (a) true (b) false
25. A Java annotation line is treated as a Java statement in the program.
- (a) true (b) false
26. If you configure a servlet in both the `web.xml` and in an annotation, which one takes the precedence?
- (a) the one in the `web.xml` (b) the one in the annotation

27. In Java web applications, we can use the Java annotations to completely replace the XML-based configuration file, namely `web.xml`.
- (a) true (b) false
28. A Java programmer needs to process an HTTP request directly all the time.
- (a) true (b) false
29. A web browser can convert a Java `HttpServletResponse` object to an HTTP response before it renders the returned page.
- (a) true (b) false
30. When we develop Java servlets, we need to deal with the socket-based networking directly.
- (a) true (b) false