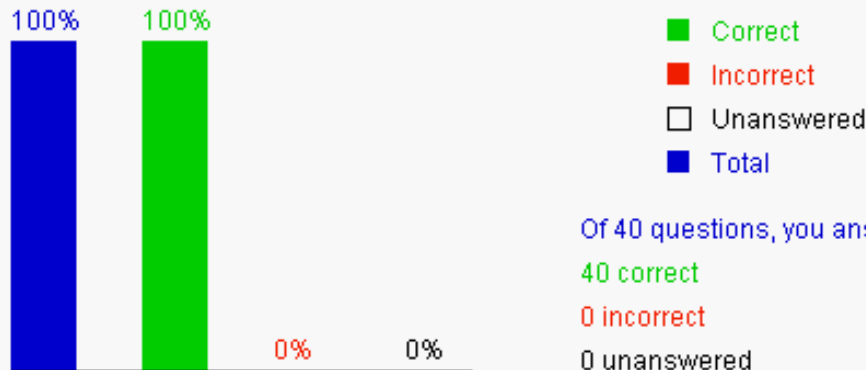


Introduction to Java Programming, Includes Data Structures, Eleventh Edition, Y. Daniel Liang

This quiz is for students to practice. A large number of additional quiz is available for instructors using Quiz Generator from the Instructor's Resource Website. Videos for Java, Python, and C++ can be found at <https://yongdanielliang.github.io/revelvideos.html>.

Chapter 1 Introduction to Computers, Programs, and Java



Of 40 questions, you answered

40 correct

0 incorrect

0 unanswered

Please send suggestions and errata to Dr. Liang at y.daniel.liang@gmail.com. Indicate which book and edition you are using. Thanks!

Section 1.2 What is a Computer?

1.1 _____ is the physical aspect of the computer that can be seen.

- ☒ A. Hardware
- ☐ B. Software
- ☐ C. Operating system
- ☐ D. Application program

Your answer is correct

1.2 _____ is the brain of a computer.

- ☐ A. Hardware
- ☒ B. CPU
- ☐ C. Memory
- ☐ D. Disk

Your answer is correct

1.3 The speed of the CPU may be measured in _____.

- ☐ A. megabytes
- ☐ B. gigabytes
- ☒ C. megahertz
- ☒ D. gigahertz

Your answer is correct

Explanation: 1 megahertz equals 1 million pulses per second and 1 gigahertz is 1000 megahertz.

1.4 Why do computers use zeros and ones?

- ☐ A. because combinations of zeros and ones can represent any numbers and characters.
- ☒ B. because digital devices have two stable states and it is natural to use one state for 0 and the other for 1.
- ☐ C. because binary numbers are simplest.
- ☐ D. because binary numbers are the bases upon which all other number systems are built.

Your answer is correct



1.5 One byte has _____ bits.

- ☐ A. 4
- ☒ B. 8
- ☐ C. 12
- ☐ D. 16

Your answer is correct



1.6 Which of the following is not permanent storage devices?

- ☐ A. floppy disk
- ☐ B. hard disk
- ☐ C. flash stick
- ☐ D. CD-ROM
- ☒ E. main memory

Your answer is correct



Explanation: Disks and CD are used to store data permanently. Data in memory is lost after the power is turned off.

1.7 _____ is a device to connect a computer to a local area network (LAN).

- ☐ A. Regular modem
- ☐ B. DSL
- ☐ C. Cable modem
- ☒ D. NIC

Your answer is correct



Explanation: Network Interface Card (NIC) is a device to connect a computer to a local area network.

Section 1.3 Program Languages

1.8 _____ are instructions to the computer.

- ☐ A. Hardware
- ☒ B. Software
- ☒ C. Programs
- ☐ D. Keyboards

Your answer is correct



1.9 Computer can execute the code in _____.

- ☒ A. machine language
- ☐ B. assembly language
- ☐ C. high-level language
- ☐ D. none of the above

Your answer is correct



1.10 _____ translates high-level language program into machine language program.

- ☐ A. An assembler
- ☒ B. A compiler
- ☐ C. CPU
- ☐ D. The operating system

Your answer is correct



Section 1.4 Operating Systems

1.11 _____ is an operating system.

- ☐ A. Java
- ☐ B. C++
- ☒ C. Windows
- ☐ D. Visual Basic
- ☐ E. Ada

Your answer is correct



1.12 _____ is a program that runs on a computer to manage and control a computer's activities.

- ☒ A. Operating system
- ☐ B. Java
- ☐ C. Modem
- ☐ D. Interpreter
- ☐ E. Compiler

Your answer is correct



Section 1.5 Java, World Wide Web, and Beyond

1.13 Java was developed by _____.

- ☒ A. Sun Microsystems
- ☐ B. Microsoft
- ☐ C. Apple
- ☐ D. IBM
- ☐ E. Cisco Systems

Your answer is correct



1.14 Due to security reasons, Java _____ cannot run from a Web browser in the new version of Java.

- ☐ A. applications
- ☒ B. applets
- ☐ C. servlets
- ☐ D. Micro Edition programs

Your answer is correct



1.15 _____ is not an object-oriented programming language.

- ☐ A. Java
- ☐ B. C++
- ☒ C. C
- ☐ D. C#
- ☐ E. Python

Your answer is correct



1.16 _____ is interpreted.

- ☒ A. Java
- ☐ B. C++
- ☐ C. C
- ☐ D. Ada

☐ E. Pascal

Your answer is correct



1.17 _____ is architecture-neutral.

- ☒ A. Java
☐ B. C++
☐ C. C
☐ D. Ada
☐ E. Pascal

Your answer is correct



Section 1.6 The Java Language Specification, API, JDK, and IDE

1.18 _____ is a technical definition of the language that includes the syntax and semantics of the Java programming language.

- ☒ A. Java language specification
☐ B. Java API
☐ C. Java JDK
☐ D. Java IDE

Your answer is correct



1.19 _____ contains predefined classes and interfaces for developing Java programs.

- ☐ A. Java language specification
☒ B. Java API
☐ C. Java JDK
☐ D. Java IDE

Your answer is correct



1.20 _____ consists of a set of separate programs for developing and testing Java programs, each of which is invoked from a command line.

- ☐ A. Java language specification
☐ B. Java API
☒ C. Java JDK
☐ D. Java IDE

Your answer is correct



1.21 _____ provides an integrated development environment (IDE) for rapidly developing Java programs. Editing, compiling, building, debugging, and online help are integrated in one graphical user interface.

- ☐ A. Java language specification
☐ B. Java API
☐ C. Java JDK
☒ D. Java IDE

Your answer is correct



Section 1.7 A Simple Java Program

1.22 The main method header is written as:

- ☐ A. public static void main(string[] args)
☐ B. public static void Main(String[] args)
☒ C. public static void main(String[] args)
☐ D. public static main(String[] args)

- ☐ E. `public void main(String[] args)`

Your answer is correct



1.23 Which of the following statements is correct?

- ☐ A. Every line in a program must end with a semicolon.
- ☒ B. Every statement in a program must end with a semicolon.
- ☐ C. Every comment line must end with a semicolon.
- ☐ D. Every method must end with a semicolon.
- ☐ E. Every class must end with a semicolon.

Your answer is correct



1.24 Which of the following statements is correct to display Welcome to Java on the console?

- ☐ A. `System.out.println('Welcome to Java');`
- ☒ B. `System.out.println("Welcome to Java");`
- ☐ C. `System.println("Welcome to Java");`
- ☐ D. `System.out.println('Welcome to Java');`
- ☐ E. `System.out.println("Welcome to Java');`

Your answer is correct



Section 1.8 Creating, Compiling, and Executing a Java Program

1.25 The JDK command to compile a class in the file Test.java is

- ☐ A. `java Test`
- ☐ B. `java Test.java`
- ☒ C. `javac Test.java`
- ☐ D. `javac Test`
- ☐ E. `JAVAC Test.java`

Your answer is correct



1.26 Which JDK command is correct to run a Java application in ByteCode.class?

- ☒ A. `java ByteCode`
- ☐ B. `java ByteCode.class`
- ☐ C. `javac ByteCode.java`
- ☐ D. `javac ByteCode`
- ☐ E. `JAVAC ByteCode`

Your answer is correct



1.27 Java compiler translates Java source code into _____.

- ☒ A. Java bytecode
- ☐ B. machine code
- ☐ C. assembly code
- ☐ D. another high-level language code

Your answer is correct



1.28 _____ is a software that interprets Java bytecode.

- ☒ A. Java virtual machine
- ☐ B. Java compiler
- ☐ C. Java debugger
- ☐ D. Java API

Your answer is correct



1.29 Suppose you define a Java class as follows, the source code should be stored in a file named _____.

```
public class Test {  
  
}
```

- ☐ A. Test.class
- ☐ B. Test.doc
- ☐ C. Test.txt
- ☒ D. Test.java
- ☐ E. Any name with extension .java

Your answer is correct



1.30 The extension name of a Java bytecode file is

- ☐ A. .java
- ☐ B. .obj
- ☒ C. .class
- ☐ D. .exe

Your answer is correct



1.31 The extension name of a Java source code file is

- ☒ A. .java
- ☐ B. .obj
- ☐ C. .class
- ☐ D. .exe

Your answer is correct



1.32 Which of the following lines is not a Java comment?

- ☐ A. /** comments */
- ☐ B. // comments
- ☒ C. -- comments
- ☐ D. /* comments */
- ☒ E. ** comments **

Your answer is correct



1.33 Which of the following are the reserved words?

- ☒ A. public
- ☒ B. static
- ☒ C. void
- ☒ D. class

Your answer is correct



1.34 Every statement in Java ends with _____.

- ☒ A. a semicolon (;)
- ☐ B. a comma (,)
- ☐ C. a period (.)
- ☐ D. an asterisk (*)

Your answer is correct



1.35 A block is enclosed inside _____.

- ☐ A. parentheses
- ☒ B. braces
- ☐ C. brackets
- ☐ D. quotes

Your answer is correct



Section 1.9 Programming Style and Documentation

1.36 Programming style is important, because _____.

- ☐ A. a program may not compile if it has a bad style
- ☐ B. good programming style can make a program run faster
- ☒ C. good programming style makes a program more readable
- ☒ D. good programming style helps reduce programming errors

Your answer is correct



1.37 Analyze the following code.

I:

```
public class Test {  
    public static void main(String[] args) {  
        System.out.println("Welcome to Java!");  
    }  
}
```

II:

```
public class Test { public static void main(String[] args) {  
System.out.println("Welcome to Java!"); } }
```

- ☐ A. Both I and II can compile and run and display Welcome to Java, but the code in II has a better style than I.
- ☐ B. Only the code in I can compile and run and display Welcome to Java.
- ☐ C. Only the code in II can compile and run and display Welcome to Java.
- ☒ D. Both I and II can compile and run and display Welcome to Java, but the code in I has a better style than II.

Your answer is correct



1.38 Which of the following code has the best style?

I:

```
public class Test {  
    public static void main(String[] args) {  
        System.out.println("Welcome to Java!");  
    }  
}
```

II:

```
public class Test {  
    public static void main(String[] args) {  
        System.out.println("Welcome to Java!");  
    }  
}
```

III:

```
public class Test {  
    public static void main(String[] args) {  
        System.out.println("Welcome to Java!");  
    }  
}
```

IV:

```
public class Test {  
    public static void main(String[] args) {  
        System.out.println("Welcome to Java!");  
    }  
}
```

- ☐ A. I
- ☐ B. II
- ☐ C. III
- ☒ D. IV

Your answer is correct



Section 1.10 Programming Errors

1.39 If a program compiles fine, but it produces incorrect result, then the program suffers _____.

- ☐ A. a compilation error
- ☐ B. a runtime error
- ☒ C. a logic error

Your answer is correct



1.40 If you forget to put a closing quotation mark on a string, what kind of error will be raised?

- ☒ A. a compile error
- ☐ B. a runtime error
- ☐ C. a logic error

Your answer is correct



Explanation: This is a syntax error, which will be detected by the compiler.