

UNIT 1—GETTING STARTED WITH JAVA

CHAPTER 2—FIRST JAVA PROGRAMS

EXERCISE 2.1

1. What is a portable program?

2. Describe two features of Java that make it a better language than C++.

3. What is a thread? Describe how threads might be used in a program.

EXERCISE 2.2

1. What does JVM stand for?

2. What is byte code? Describe how the JVM uses byte code.

3. What is an applet? Describe how applets are used.

EXERCISE 2.4

1. Give a short definition of “program”.
2. What is the effect of the message *println*?
3. Describe how to use the `System.out` object.
4. Write a sequence of statements to display your name, address, and phone number in the terminal window.

Here is an example answer, which is entirely fictional:

EXERCISE 2.5

1. Name the three steps in writing and running a program.

2. What are compile-time errors?

3. Find the compile-time errors in the following statements.
 - a. `System.out.println("Here is an error);`
 - b. `System.out.println("Here is another error";`

4. Why is readability a desirable characteristic of a program?

EXERCISE 2.6

1. What is a variable in a program and how is it used?

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2. Describe the role of the assignment (=) operator in a program.
3. What is a Scanner object?
4. Explain the difference between a variable of type *double* and a variable of type *Scanner*.
5. Describe the difference between *print* and *println*, and give an appropriate example of the use of each.

REVIEW QUESTIONS

1. List three reasons why Java is an important programming language.

2. What is byte code?
3. What is the JVM?
4. List two objects that are used for terminal input and output in Java programs.
5. Give examples of two compile-time errors.
6. What steps must be followed to run a Java program?
7. Why do programmers use program comments in their code?
8. What is the purpose of an import statement in the Java program?

Fill in the Blank

1. Two user interface styles are _____ and _____
2. The message _____ is used to output data to the terminal window
3. The message _____ is used to input a number from the keyboard
4. A(n) _____ names a place where data can be stored in a Java program
5. A(n) _____ stores the value of the expression in the variable
6. Programs manipulate objects by sending them _____