

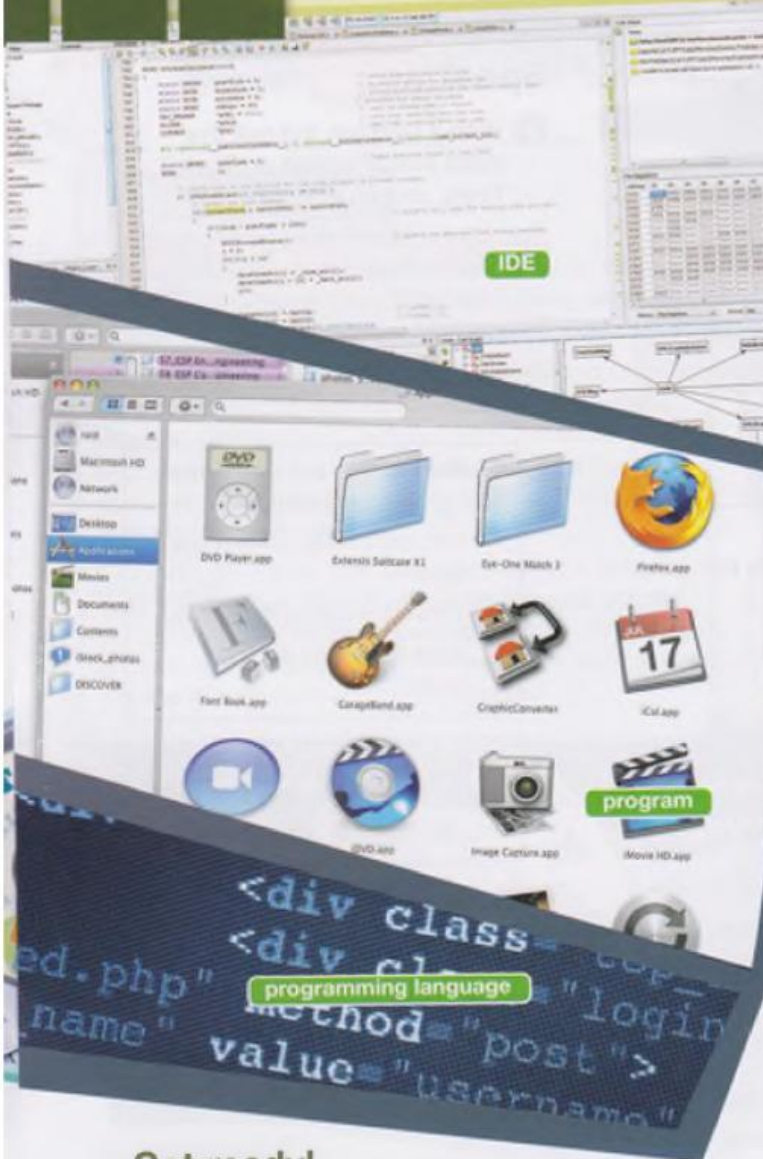
7

Programming Software

Chapter 7 Programming Software

Programming software allows programmers to develop new **programs**. The most basic programming software is a **source code editor**. These programs are usually basic **text editors**. Programmers use them to enter lines of code into a computer. Lines of code are written in a **programming language**. Programmers use this to write series of commands. When executed *together*, these commands form a complete program.

Other **programming software** are more complex. An **IDE** (integrated development environment) provides tools for writing programs. These usually include a text editor and a **debugger**. Other tools may include a **linker**, a **compiler**, or an **interpreter**.



Get ready!

- 1 Before you read the passage, talk about these questions.

- How do programmers create new programs?
- What kinds of software helps programmers write new programs?

Reading

- 2 Read the textbook chapter. Then, mark the following statements as true (T) or false (F).

- Programmers use text editors to interpret commands.
- Text editors are a type of source code editor.
- An IDE is the most basic type of programming software.

Vocabulary

- 3 Match the words (1-6) with the definitions (A-F).

- source code editor
- program
- programming language
- programming software
- interpreter
- compiler

- any software that supports the development of new applications
- a series of operations that control the functions of a computer
- codes used to write commands to a computer
- an application that decodes instructions written in other languages
- something that reads and executes other programs
- software used to enter lines of coded text

8 Read the sentence pairs. Choose which word or phrase best fits each blank.

1 text editor / IDE

- A A(n) _____ usually provides programmers with various tools for writing programs.
B A(n) _____ is a basic program for entering commands and code into a computer.

2 debugger / linker

- A A _____ provides links to additional information needed for programs to run.
B A _____ finds and corrects errors in code.

9 Listen and read the textbook chapter again. What tools does an IDE provide?

Listening

10 Listen to a conversation between two students. Choose the correct answers.

- What is the conversation mostly about?
 - how to interpret instructions in programming code
 - the difference between two types of computer programs
 - techniques for entering code into a text editor
 - the importance of learning different programming languages
- According to the woman, what is sometimes needed to run programs correctly?
 - using a linker and a compiler together
 - allowing programs to connect to the internet
 - writing new instructions in a programming language
 - translating lines of code into a different programming language

11 Listen again and complete the conversation.

Student 1: Can you help me with something?
Student 2: Sure. What is it?
Student 1: I'm confused 1 _____ between linkers and compilers.
Student 2: Okay. Well, 2 _____ a program to information it needs from other programs.
Student 1: Wait, I thought an 3 _____ did that.
Student 2: No. An interpreter just 4 _____ so the program can run.
Student 1: Okay. So then a compiler is 5 _____ program instructions.
Student 2: Exactly. It translates information from different 6 _____.
Student 1: I get it now. Thanks.

Speaking

8 With a partner, act out the roles below based on Task 7. Then, switch roles.

USE LANGUAGE SUCH AS:

Can you help me with ...
I'm having some trouble ...
I was under the impression ...

Student A: You are a student.
Talk to Student B about:

- terms you are confused about
- what you thought the terms meant
- what the terms actually mean

Student B: You are a student.
Talk to Student A about terms that he or she is confused about.

Writing

9 Use the conversation from Task 8 to complete the workbook exercise.

Explain the difference between each set of terms:

- Debugger / _____ :
A debugger is used for finding and correcting errors in code.
A(n) _____ is used for _____.
- _____ / text editor:
A(n) _____ is used for _____.
A text editor is used to enter lines of code and create programs.