

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.

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

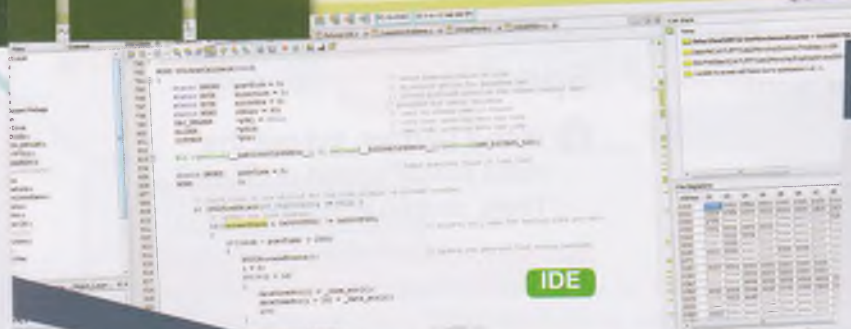
Reading

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

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

- 1 ___ source code editor
- 2 ___ program
- 3 ___ programming language
- 4 ___ programming software
- 5 ___ interpreter
- 6 ___ compiler

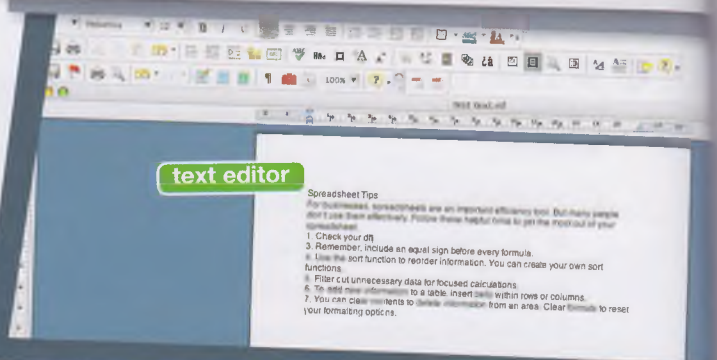
- A any software that supports the development of new applications
- B a series of operations that control the functions of a computer
- C codes used to write commands to a computer
- D an application that decodes instructions written in other languages
- E something that reads and executes other programs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



IDE



program



text editor

Spreadsheet Tips
 For businesses, spreadsheets are an important efficiency tool. But many people don't use them effectively. Follow these helpful tips to get the most out of your spreadsheet.

1. Check your math.
2. Remember to include an equal sign before every formula.
3. Use the sort function to reorder information. You can create your own sort functions.
4. Filter out unnecessary data for focused calculations.
5. To add new information to a table, insert cells within rows or columns.
6. You can clear comments to delete information from an area. Clear formulas to reset your formatting options.

Vocabulary

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

6 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.

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

Listening

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

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

7 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:

1 Debugger / _____ :

A debugger is used for finding and correcting errors in code.

A(n) _____ is used for _____.

2 _____ / text editor:

A(n) _____ is used for _____.

A text editor is used to enter lines of code and create programs.

Get ready!

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

- 1 What types of application software do businesses typically use?
- 2 What types of application software do people typically use at home?

ShorSoft Software Developers

We are the most trusted name in **application software**. Our software will enhance any project.

Our **office suite** comes standard with **word processing** software. You can also add our optional **accounting** software. Our **spreadsheets** will keep your household or small business organized.

Do you own a large company? Get ShorSoft Deluxe. This **enterprise software** has everything you need to manage your business.

ShorSoft's **desktop publishing** software is very user-friendly. It allows users to create prints and web layouts. It even optimizes documents for different **web browsers**.

We also offer **video editing** and **image editing** software. Preserve your family memories with high-quality videos and photos.

Reading

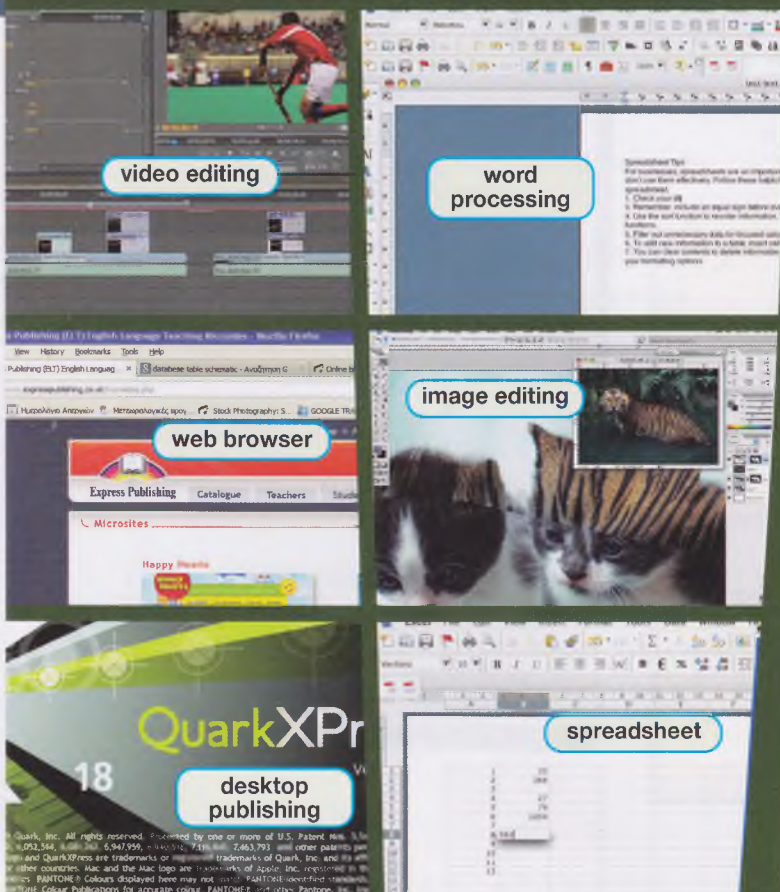
2 Read the advertisement. Then, choose the correct answers.

- 1 What kind of software is available to add on to the office suite?
 - A video editing software
 - B word processing software
 - C accounting software
 - D desktop publishing software
- 2 Which of the following is NOT offered by the company?
 - A web browsers
 - B image editors
 - C accounting software
 - D word processing programs
- 3 What is a feature of the company's desktop publishing software?
 - A It keeps track of household information.
 - B It comes standard with word processing software.
 - C It makes documents easy to read on webpages.
 - D It allows high-quality photo and video preservation.

Vocabulary

3 Choose the sentence that uses the underlined part correctly.

- 1 A Application software can mean many different types of software.
 - B Desktop publishing software is used to keep track of purchases and expenses.
- 2 A Users can edit videos and photos with word processing software.
 - B Books and brochures are designed with desktop publishing software.
- 3 A Application software allows users to view web pages.
 - B Text documents are produced with word processing software.
- 4 A Video editing software lets users create movies on their computers.
 - B Spreadsheets can be played on computers or other consoles.



4 Fill in the blanks with the correct words and phrases from the word bank.

word BANK

accounting office suite enterprise software
image editing web browser spreadsheet

- 1 _____ software records and manages transactions.
- 2 A(n) _____ usually includes a word processor.
- 3 Many large corporations use _____ to maintain consistency in all their systems.
- 4 _____ software can be used to retouch photographs.
- 5 Users often check their email using a(n) _____.
- 6 Large sets of data can be organized into a _____.

5 Listen and read the advertisement again. What types of application software does the company make?

Listening

6 Listen to a conversation between two software engineers. Mark the following statements as true (T) or false (F).

- 1 ___ The man is excited about the accounting software.
- 2 ___ The accounting software will be included in the office suite.
- 3 ___ The engineers will develop the accounting software before they update the word processor.

7 Listen again and complete the conversation.

Engineer 1: Did you see 1 _____ from the CEO?
 Engineer 2: Do you mean the one about the 2 _____?
 Engineer 1: Yeah. They want a whole new program for 3 _____. We're supposed to develop it by the end of the month.
 Engineer 2: I think that's a good idea. A lot of our customers probably use accounting anyway.
 Engineer 1: Yeah, but I'm worried. What will that mean for the 4 _____ in our office suite?
 Engineer 2: What do you mean?
 Engineer 1: Well, our word processor needs to 5 _____. I'm afraid that a new program will take away from that.
 Engineer 2: I 6 _____, but I think it'll be fine. Another team is scheduled to complete that update this week.

Speaking

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

USE LANGUAGE SUCH AS:

*Did you see ... / I think ...
I see what you mean, but ...*

Student A: You are an engineer. Talk to Student B about:

- developments at your software company
- your concerns about the developments

Student B: You are an engineer. Talk to Student A about new developments at your software company.

Writing

9 Use the conversation from Task 8 to complete the company's software product index.

Product Descriptions



_____ : Use this software to perfect your photos and preserve your family memories.

Office suite: _____

_____ : This software will help you keep track of your budget on a monthly or weekly basis. It's a good program to have when tax season comes.

Video editing software: _____