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*, *th*ese 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**.

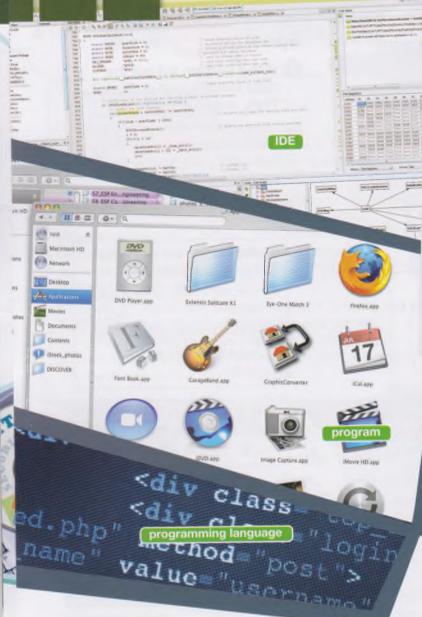## Get ready!

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

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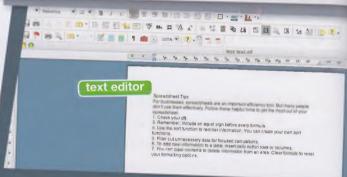2 What kinds of software helps programmers write new programs?

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.

Vocabulary

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

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

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4 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.