

2

Programming languages

C++



.xml
.h,rc,.bml

Mr. Daniels,

As the head of the computer programming department, I feel that we need to update the department's resources. This includes our programmers. Most of our programmers are comfortable with the **C**, **C++**, and **Java** computer languages. We even have one programmer who can use **C#**. But we don't have anyone proficient in **Assembler**. I think we need some programmers who are familiar with it. That way, we can translate between programs more easily.

In addition, we have two programmers who specialize in **BASIC**. This language is in decline and will probably be phased out soon.

Some of our machines are getting older, too. A few computers need their **compilers** and **linkers** updated. Otherwise, they'll never be able to convert to **machine code** efficiently. One of our older **CPU** cannot **multi-thread** very well. As you know, the programming department is very important to the company's future. Please help us stay updated.

Thanks,
Sarah Jennings

Get ready!

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

- How does computer programming affect business?
- Why is computer programming becoming more important?

Reading

2 Read the letter from the head of a computer programming department to her boss. Then, choose the correct answers.

- What is the letter mainly about?
 - purchasing more CPUs
 - writing better computer programs
 - learning new computer languages
 - requesting updated resources
- Which of these programming languages do the programmers NOT know?

A C#	C BASIC
B Assembler	D C++
- What can be inferred about BASIC?
 - It is used in Assembler.
 - It is used less frequently than C++.
 - It cannot be used by compilers.
 - It is the most difficult to learn.

Vocabulary

3 Write a word that is similar in meaning to the underlined part.

- He's writing a new language that computers can process.
c _ _ _ _ _ r _ _ _ _ u _ _ _
- An object-oriented programming language is used often.
_ _ v _
- I'd use a programming language that translates between programs. _ s s _ _ _ _ _
- Many of the first PCs used an early programming language that is not widely used anymore.
_ _ s _ C
- Harold often used a competitor to Java instead of Java. _ _
- Do you know a programming language that adds capabilities to C? _ _ +
- Linux® is created with a programming language that programs operating systems. _
- The central processing unit is a computer's most important part. _ P _
- A computer part that changes source code into machine code is essential to programming. _ _ _ _ _ e r

4 Check (✓) the sentence that uses the underlined parts correctly.

- 1 — A Linkers allow programmers to control computers.
— B CPU was the first programming language.
- 2 — A A new Java can make your computer run faster.
— B Machine code makes programming possible.
- 3 — A Added memory allows computers to multi-thread.
— B I'm learning compiler, a new programming language.

5 Listen and read the letter from the head of a computer programming department to her boss. Why will a few of the old computers need their linkers and compilers updated?

Listening

6 Listen to a conversation between a programmer and her manager. Mark the following statements as true (T) or false (F).

- 1 — The manager intends to hire more programmers.
- 2 — The woman is going to learn Assembler.
- 3 — The manager denied the request to upgrade the CPUs.

7 Listen again and complete the conversation.

Programmer: Well, without someone who knows Assembler we can't efficiently 1 _____.

Manager: I know, but I think the best way to address that problem is to have you trained in it.

Programmer: I'm up for that. But I'm worried that I'll get behind on the 2 _____ programs I'm writing.

Manager: We can shift some of your workload to other 3 _____, then.

Programmer: Okay. What do you think about our 4 _____?

Manager: How pressing would you say those needs are?

Programmer: If we had some updated CPUs, we could finish our projects in a 5 _____.

Manager: All right. Let me 6 _____ at the budget and see what I can do.

Speaking

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

USE LANGUAGE SUCH AS:

*I don't think we can afford more programmers.
What do you think about our CPU needs?
How pressing would you say those needs are?*

Student A: You are talking to a programmer. Ask Student B about:

- department's needs
- importance of needs
- possible solutions

Student B: You are a programming employee. Answer Student A's questions.

Writing

9 Use the conversation from task 8 to write an email to your manager to ask for updated resources. Create names for the employee and his/her manager.

To: _____

From: _____

Subject: _____

Dear _____

Thanks,
