



2 Programming languages

C++


Java


.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 **CPUs** cannot **multi-thread** very well. As you know, the programming department is very important to this company's future. Please help us stay updated.

Thanks,
Sarah Jennings

Get ready!

- 1 Before you read the passage, talk about these questions.
 - 1 How does computer programming affect business?
 - 2 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.
 - 1 What is the letter mainly about?
 - A purchasing more CPUs
 - B writing better computer programs
 - C learning new computer languages
 - D requesting updated resources
 - 2 Which of these programming languages do the programmers NOT know?
 - A C# C BASIC
 - B Assembler D C++
 - 3 What can be inferred about BASIC?
 - A It is used in Assembler.
 - B It is used less frequently than C++.
 - C It cannot be used by compilers.
 - D It is the most difficult to learn.

Vocabulary

- 3 Write a word that is similar in meaning to the underlined part.
 - 1 He's writing a new language that computers can process.
C _ _ _ _ _ r _ _ _ _ u _ _ _
 - 2 An object-oriented programming language is used often.
_ _ v _
 - 3 I'd use a programming language that translates between programs. _ s s _ _ _ _ _
 - 4 Many of the first PCs used an early programming language that is not widely used anymore.
_ _ s _ c
 - 5 Harold often used a competitor to Java instead of Java. _ _
 - 6 Do you know a programming language that adds capabilities to C? _ _ +
 - 7 Linux® is created with a programming language that programs operating systems. _
 - 8 The central processing unit is a computer's most important part. _ P _
 - 9 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,