

# UNIT 11: Program design and computer language

**PHẦN 1: The table gives you information about some programming languages. Decide what would be the most appropriate language to use for each of these situations.**

1. A schoolteacher wants his young pupils to learn some basic mathematics by controlling a simple robot. ....
2. The owner of a small business wants to create a simple database program to keep track of his stock. ....
3. An engineer wants to develop a program for calculating the stresses in a mechanical device. ....
4. A student wants to create webpages for a personal website. ....
5. A systems programmer wants to add some new modules to an operating system. ....
6. A programmer working for the US army wants to create a program for controlling a new type of weapon. ....
7. A finance company needs to process data from its branch offices on its mainframe computer. ....
8. A website designer wants to enable the data on his website to be easily processed by a number of different programs. ....
9. A student studying artificial intelligence wants to write some programs for a course project. ....
10. A college lecturer wants his students to learn the principles of programming. ....
11. A professional programmer wants to create and sell a program for use in language learning. ....
12. A website designer wants to password-protect a section of a website. ....

<b>Java</b>	Developed by Sun Microsystems in the mid-1990s, Java is widely used for developing interactive applications for the Internet.
<b>Ada</b>	Named after Countess Ada Lovelace (one of the first programmers); it is a superset of Pascal. Ada is a structured language developed and used by the US Department of Defense.
<b>Logo</b>	Logo is an easy-to-use language that is primarily used to teach children how to program.
<b>LISP</b>	Stands for LISt Processor; LISP is designed to process nonnumeric data - that is, symbols such as characters or words. It is used to develop applications in the field of artificial intelligence.
<b>FORTRAN</b>	Stands for FORmula TRANslator; FORTRAN was designed by scientists in 1954 and is oriented toward manipulating formulas for scientific, mathematical, and engineering problem-solving applications.
<b>HTML</b>	Stands for HyperText Markup Language; HTML is a page description language used to prepare a text for display in a browser program.

<b>Peri</b>	Its name comes from Practical Report and Extraction Language. It first appeared in 1987 as a Unix-based tool for producing reports but is now widely used for creating interactive webpages.
<b>Prolog</b>	Stands for PROgramming LOGic; Prolog is used to develop applications in the field of artificial intelligence. It is a popular tool for natural-language programming.
<b>XML</b>	Stands for extensible Markup Language; XML is a metalanguage for creating webpages with meaningful data that can be used by a variety of programs.
<b>C++</b>	C++ is an object-oriented superset of C which combines the best features of a structured high-level language and an assembly language - that is, it's relatively easy to code and uses computer resources efficiently. C was originally designed to write systems software but is now considered a general purpose language.
<b>Visual Basic</b>	BASIC stands for Beginners' All-purpose Symbolic Instruction Code; Visual Basic is a simple-to-use language that has a graphical interface. It makes it particularly easy for an inexperienced programmer to create database programs.
<b>Pascal</b>	Pascal, named after the mathematician Blaise Pascal, was created primarily to fill the need for a teaching vehicle that would encourage structured programming. It is often used in college computing courses.
<b>COBOL</b>	Stands for COMmon Business-Oriented Language; it has been around for a long number of years but is still an important transaction-processing language used to process the records of large organisations on mainframe computers.

**<RECOMMENDATION> A helpful way to improve your English skills is practicing it through online programming courses. Check out some of the free online courses!**

**- Java**

<https://www.learnjavaonline.org/>

<https://www.codecademy.com/learn/learn-java>

<https://www.udemy.com/java-tutorial/>

**- Python**

<https://www.learnpython.org/>

<https://www.datacamp.com/courses/intro-to-python-for-data-science>