Computer programming languages allow us to give instructions to a computer in a language the computer understands. Just as many human-based languages exist, there are an array of computer programming languages that programmers can use to communicate with a computer. The portion of the language that a computer can understand is called a “binary.” Translating programming language into binary is known as “compiling.” Each language, from C Language to Python, has its own distinct features, though many times there are commonalities between programming languages.   
  
These languages allow computers to quickly and efficiently process large and complex swaths of information. For example, if a person is given a list of randomized numbers ranging from one to ten thousand and is asked to place them in ascending order, chances are that it will take a sizable amount of time and include some errors.  
  
There are dozens of programming languages used in the industry today. We’ve compiled overviews of the 12 most important, relevant and in-demand of these languages below.

1. **Python:** Python is an advanced programming language that is interpreted, object-oriented and built on flexible and robust semantics.
2. **Java:** Java is a general-purpose, object-oriented, high-level programming language with several features that make it ideal for web-based development.

## HTML( HyperText Markup Language): HTML is the standard markup language used to create web pages; it ensures proper formatting of text and images (using tags) so that Internet browsers can display them in the ways they were intended to look.

1. **Ruby/Ruby on Rails**: Ruby is an open-sourced, object-oriented scripting language that can be used independently or as part of the Ruby on Rails web framework.
2. **JavaScript:** JavaScript is a client-side programming language that runs inside a client browser and processes commands on a computer rather than a server. It is commonly placed into an HTML or ASP file. Despite its name, JavaScript is not related to Java.
3. **C language:** C Language is a structure-oriented, middle-level programming language mostly used to develop low-level applications.
4. **C++:** C++ is a general purpose, object-oriented, middle-level programming language and is an extension of C language, which makes it possible to code C++ in a “C style”. In some situations, coding can be done in either format, making C++ an example of a hybrid language.
5. **C#:** Pronounced C-sharp (not C-hashtag), C# is a multi-paradigm programming language that features strong typing, imperative, declarative, functional, generic, object-oriented and component-oriented disciplines.
6. **Objective C:** Objective-C is a simple, general-purpose and object-oriented language. It uses a system of message passing borrowed from the language Smalltalk; when an object in Objective-C is sent a message, it can choose to ignore or forward to another object, rather than return a value.
7. **PHP:** PHP is an open-source scripting language designed for creating dynamic web pages that effectively work with databases. It is also used as a general-purpose programming language.

## SQL(Structured Query Language): SQL is a database query language (not a development language) that allows for adding, accessing and managing content in a database. It is the language that allows programmers to perform the common acronym CRUD (Create; Read; Update; Delete) within a database.

1. **Swift:** Swift is Apple’s newest open-source, multi-paradigm programming language for iOS and OS X apps. Swift integrates Objective-C’s named parameters and object-oriented model, while including an advanced compiler, debugger and framework infrastructure.

* **Console application:** Console applications are light weight programs run inside the command prompt (DOS) window. They are commonly used for test applications. Console-based applications include Alpine (an e-mail client), cmus (an audio player), Irssi (an IRC client), Lynx (a web browser), Midnight Commander (a file manager), Music on Console (an audio player), Mutt (an e-mail client), nano (a text editor), ne (a text editor), newsbeuter (an RSS reader), and ranger (a file manager).
* **Windows Application:** Windows Applications are form based standard Windows desktop applications for common day to day tasks. Microsoft word is an example of a Windows application.
* **Web application:** Web applications are programs that used to run inside some web server (e.g., IIS) to fulfill the user requests over the http. A typical example of web application is Hotmail and Google.
* **Web service:** Web services are web applications that provide services to other applications over the internet. Google search engine’s web service allows other applications to delegate the task of searching over the internet to Google web service and use the result produced by it in their own applications.