Evolution of Programming Languages

More than a thousand languages are available today. Each languages has a number of advantages and disadvantages over competitors. First computers had limited resources so programming languages must use resources efficiently. And this was their most important feature. This feature has advantages and disadvantages such as programming languages like Assembly and C has more performance but, they were very hard to write and understand for programmers. Technology has evolved over time. Performance achieved to a certain limit. Nowadays there are new motto. People accepts programmers time more important than computers time. They created new programming languages with new features. Some of those are Java, C#, Python, Swift. Performance is in the second plan in this languages. First goal is writing less code and making more jobs so we can say this. Spend less time, work in average performance.(New languages are very clever. This average performance is enough for today.) But n some areas, for example operating systems, embedded system etc. performance still in the foreground. So empire of languages like C, It does not seem to end.

If we talk about this new motto, all new languages tries to find and add new features. According to RedMonk and IEEE analysis, innovative languages like Java, Ruby, JavaScript , Python, Rust are important. Job employers pays too much many for programmers who knows new languages and programmers love to. They don't have to care mush about efficiency and security of languages. They just types and sees results. It's to easy write in new languages. If you work in Web, Java is the best choice to make much money in short time. It has too many frameworks. For working academical, mathematical areas python, c++, lisp will be a good choice. Especially lisp is a very good functional language. It provide producing results without side effects.

Consequently, science has evolved a lot and continues to evolve. There is no perfect language for use all areas yet. To find a job quickly and to be best in this area(computer world) it would be good to learn new programming languages and their frameworks. For web java, js, angularJs will be a good combine, for tasks which require performance C/C++, academical works Haskell, Lisp, Python will be good to learn. All of this languages were 3rd generation or high-level programming languages but there are new generation. [4th generation](#) languages which can process human commands and produce and logical result which human can understand easy will take an important place in the future.