



Best way to learn programming

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We will start with the following concepts

- 1) What exactly is programming?
- 2) How can you master programming languages faster
- 3) Learners loop Algorithm

What is a programming language?

- ★ Just like human language, programming languages are a way to communicate to computer.
- ★ So, you have learn all the elements of human languages in the programming world to master a particular language :
 - You need to know how things are said/or the grammar - **that's syntax**
 - You need to know what to say - **That's logic**
 - You need to know how to form basic sentences to convey an instruction or convey your message - **that's commands, methods, functions and other stuff.**
 - You need to learn how to convey complex instructions - **that's loops, conditionals etc.**

So many things to learn, how to catch up and remember?

- 1) Remember how you learnt your native language? Nobody taught you the grammar when you were 2 or 3 years old!
- 2) You learnt it by using it in daily life. By talking to people around you and then observing their response. And then with formal training(school education), you mastered it
- 3) Similarly you can master a programming language only by writing multiple programs, solving different problems using programming and practicing it daily till it becomes as obvious and easy as your mother tongue.

Some Dos and Don'ts

- 1) Do not sit down and try to memorize programming language. You will never be able to master it that way!
- 2) What happens when you don't know how to say a word or a phrase in a language - you look it up in dictionary or ask around - you have to do the same while learning programming.
- 3) You may take help of google, online tutorial and community, your colleagues or co-learners, social media and last but not the least, our support discussion board.

Learners Loop Algorithm

1. Understand the problem statement completely- Every program in computer has a input, output and a logic. Make sure you are clear about them before writing the program.
2. If the logic is clear to you, ask yourself whether or not you know how to implement that in your language.
3. If you can think you can start coding right away and don't get up unless you have solved the problem.
4. If you think you cannot solve the problem with the current knowledge and skills you possess and there may be something missing, then seek the solutions using the methods described in previous slide . Don't give up. Do the research!

Learners Loop Algorithm

5. Once you have solved the problem using step 3 or 4 and you are all done and dusted. Just verify that your solution is the most optimal solution or not. You will learn about optimizations and performance measuring as and when you grow in your career.

Measure the performance, check for scope of code optimization, research more and find out whether your method is the best approach or not. Or is there any other possibility. Talk to people

6. Repeat the steps for multiple problems.

Ending note....

- 1) Programming or any development technology is scary only if you make it!
- 2) You can always outgrow or overcome your fears.
- 3) This career path has been designed keeping in mind that the learner may be somebody who has never programmed in his life.
 - a) If you are a beginner, you will find the experience comforting
 - b) If you are at intermediate level, you will be able to pick up a lot of things a lot faster than you have done previously
 - c) If you are a pro, this may be a bit slow experience for you. But as the career path progresses, I am confident that you will find things becoming challenging enough for your intellect and you will love the overall experience.

The next steps are ...

- Javascript Basics