

Cheatsheet: Guide from a self-taught programmer

Note: If you do not sleep it is going to take exactly 24 hours to go over all the resources. Since it is reasonable to sleep (I do it also), please distribute the load over a few days! 😊

1. Warming up steps. [Optional] Go over an algebra cheat sheet from [here](#). Try to recall some of the concepts and see if you still get the logic. [Optional] Read through some of the algebra examples [here](#).
2. Read [this](#) introduction to computer science and then watch a video from [here](#). Familiarize yourself with [this](#) computer basics cheat sheet.
3. See [here](#) why programming matters. Understand the high-level logic of object-oriented programming from [here](#). Select an object-oriented programming language to learn (Python or Go). Read [this](#) post to compare benefits. If you have opted for Python, read from zero to hero [here](#). For Go, see [this](#). No one writes Java any longer but if you decide to have a look at the first steps, see [that](#).
4. [Optional] If you prefer fronted languages, you can read [this](#) and [that](#). Then you can continue with [VueJS](#) or [React](#). This is not a substitute for object-oriented language to go over.
5. Read every part of [this](#) post to understand databases (there are 10 parts - read EVERY). Start interacting with one database, e.g. Redis by reading more [here](#) and applying what you learned as shown in [this](#) post. Redis is close to me because I work at Redis but it is also great to get up to speed in minutes (feel free to choose e.g. [MongoDB](#) or [MySQL](#) if you prefer).
6. Understand the high level of networking from my post [here](#). Read also [this](#) and [that](#). Skim through a computer network cheat sheet from [here](#) and see if you recognize the terms. If you prefer videos you can watch one [here](#).
7. Understand Git basics from [here](#) and start a small project. Read [here](#) about what a good collaboration in software engineering means. Stick to the Zen commandments of Python from [this](#) post while working in engineering (any programming language).
8. Get the main concepts of good software architecture from [this](#) post. Keep on reading about microservice software architecture from [here](#) and [there](#). Spend some time on understanding computer security in [this](#) article.
9. Read the top mistakes in software engineering [here](#) and [there](#). Understand scrum and agile from [this](#) post. Already start preparing for an interview by looking at the possible questions from [here](#) and [there](#).
10. Going on, the main resource to keep close is [this](#). There are all the possible languages you can keep on learning. Follow one or more tech blogs from [this](#) list. Follow some of the engineering world authorities from [here](#) on Twitter (or other networks).