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Thread: [Low level programming](#)

Mestizolover - August 28, 2016, 6:30 pm

So i want to start learning more about coding in lower level languages since i think i have a knoweldge gap in that area that is causing me some problems. So my question is, can you guys recommend me some learning resources that for low-level coding? And i am guessing that for that one also needs to know about how memory and processes work in the computer, so that included.

arborem - August 28, 2016, 7:47 pm

When you're talking about 'low level', I assume you're talking about something like assembly. First watch: [youtube.com/watch?v=cNN_tTXABUA](https://www.youtube.com/watch?v=cNN_tTXABUA) and after that, try reading this: software.intel.com/en-us/articles/introduction-to-x64-assembly. It's a good introduction to assembly-language and it gives you a fast look on the structure or 'basic idea' of what assembly-programming is. What you should try, is reading it while taking notes and whenever you don't understand something, just Google it right away! It's the hard way, but I found out that it's very efficient: dissecting a tutorial in a way you start seeing the 'bigger picture'. If you start getting hold of it, you can also download the full 'Intel manual for developers' on that same page. The first chapters are quite difficult, but if you read that book, you won't miss anything. All details are well explained and there are no 'hidden snakes'. Well, I don't know if this was helpful to you; I hope so! :) Oh, and before I forget: there are small differences in the assembly-syntax between the different CPU's. What I gave you, is written for the Intel CPU's, but I'm sure you noticed that. Well, good luck learning something new!

Mestizolover - August 28, 2016, 8:53 pm

(Aug 28, 2016 07:47 PM)arborem Wrote: [\[CITE\]](#) When you're talking about 'low level', I assume you're talking about something like assembly. First watch: [youtube.com/watch?v=cNN_tTXABUA](https://www.youtube.com/watch?v=cNN_tTXABUA) and after that, try reading this: software.intel.com/en-us/articles/introduction-to-x64-assembly. It's a good introduction to assembly-language and it gives you a fast look on the structure or 'basic idea' of what assembly-programming is. What you should try, is reading it while taking notes and whenever you don't understand something, just Google it right away! It's the hard way, but I found out that it's very efficient: dissecting a tutorial in a way you start seeing the 'bigger picture'. If you start getting hold of it, you can also download the full 'Intel manual for developers' on that same page. The first chapters are quite difficult, but if you read that book, you won't miss anything. All details are well explained and there are no 'hidden snakes'. Well, I don't know if this was helpful to you; I hope so! :) Oh, and before I forget: there are small differences in the assembly-syntax between the different CPU's. What I gave you, is written for the Intel CPU's, but I'm sure you noticed that. Well, good luck learning something new!Omg, thank you so much, that video explained it so clearly so quickly! And yes i figured learning assembly would be the right approach for what i want to learn , and i also found this video series that i am liking so far [youtube.com/watch?v=UWrDCqhdlwl&index=11&list=PL4C2714CB525C3CD7](https://www.youtube.com/watch?v=UWrDCqhdlwl&index=11&list=PL4C2714CB525C3CD7), and the intel manual does intimidate me a bit not gonna lie xD,