



Intro To Malware Analysis

Callum Shanks



**Did I ever tell you the
definition of malware?**

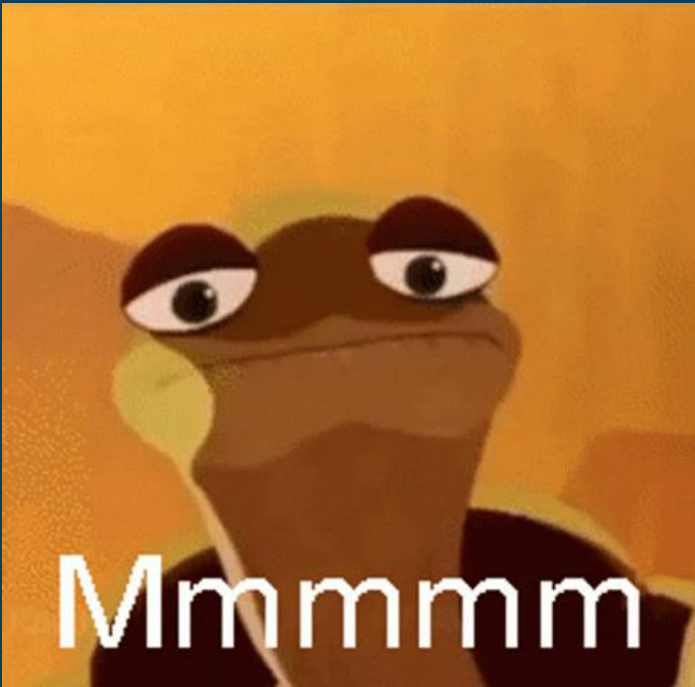
\$ whoami

- Callum Shanks (@ItsWavey_)
- Second Year
- The real Callum “Discord” Wavey
- they/thembo



Keep in mind

- You will not be a great malware analyst in a day
- You don't need to learn assembly; it will be helpful to know though
- Effective research is going to be key



YEAH, I know Assembly



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Somebody please help me
I am slowly deteriorating
mentally as I step through
my code in GDB for 80 hours
a week and all I can think
about is the sweet release
of death why the fuck
can't I just use an actual
language with libraries

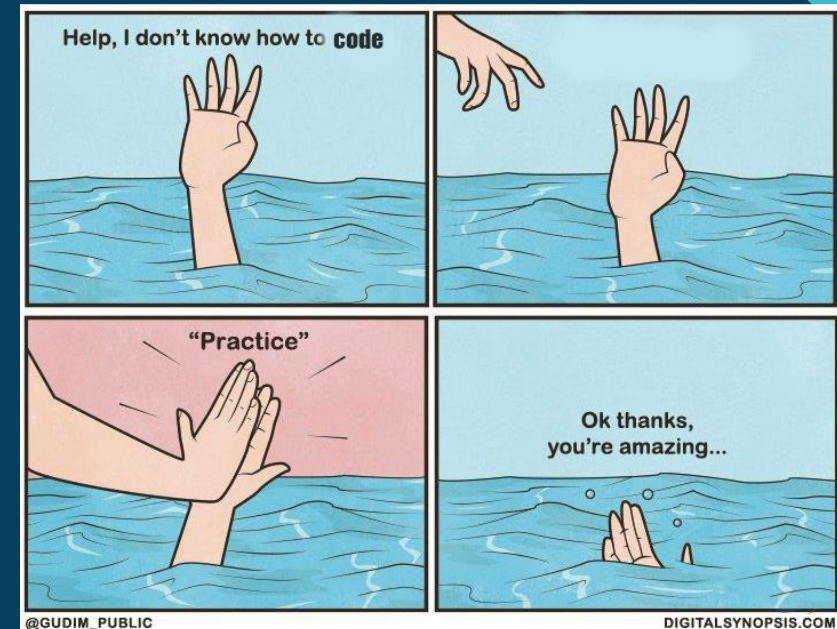
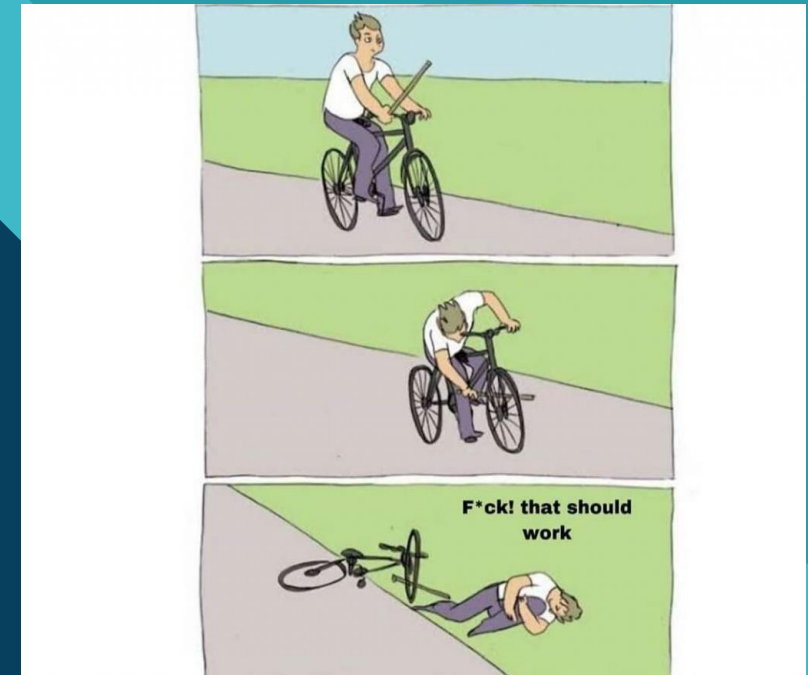
Pre-Requisites

- Familiarity with multiple programming languages (high / low level)
- RESEARCH RESEARCH RESEARCH
- Familiarity with basic Operating System concepts



Programming

- Find a language you like (c++, c, python etc. are good to know) and find a project to use it for.
- Knowing at least the basics of programming in general will help leaps and bounds.
- You don't need to know everything, you will never know everything.



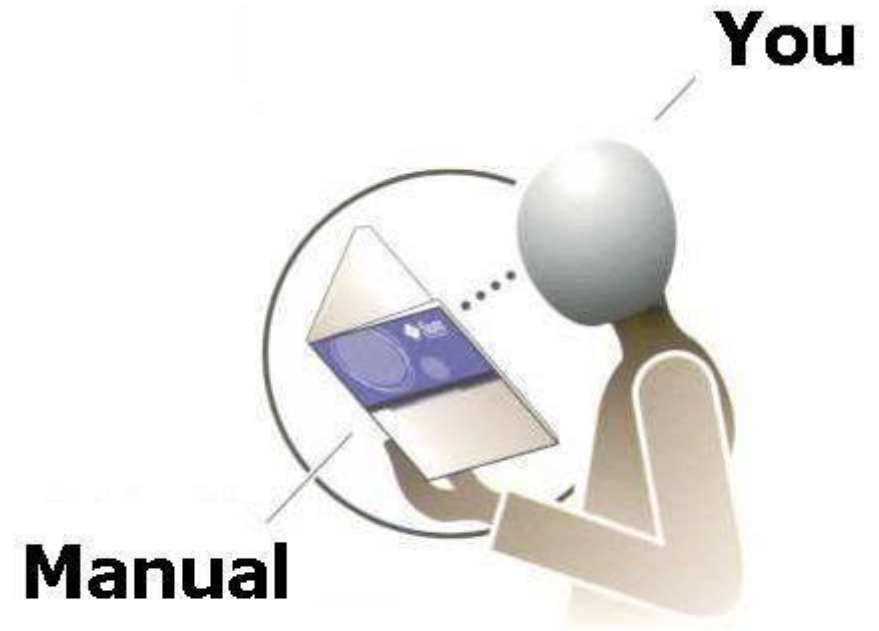
- Analysing malware is like a big obscure puzzle.
- Make the sample easier to read
- Look for common code used to execute scripts
- Look for strings like web URLs etc.

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[illegible]

Researching

- Google Fu, Google Dorking, Google Hacking etc. (there are so many names for it)
 - <http://www.googleguide.com/>
- Documentation is your friend
 - Official documentation is usually best
- Basically RTFM



Where to get samples to work on

- vx-underground
 - <https://vxug.fakedoma.in/samples.html>
- The zoo
 - <https://thezoo.morirt.com/>
- Malware bazaar
 - <https://bazaar.abuse.ch/browse/>
- Malshare
 - <https://malshare.com/index.php>
- Lists of sample sources
 - <https://zeltser.com/malware-sample-sources/>



Safety when playing with samples

- Always treat samples as if they're live, even if you know otherwise
- Be careful when visiting suspicious links found when analysing samples
- Don't run any samples unless you're in a contained environment
 - Virtual Machines / containerisation etc.



Any Questions?

- Contact me:
 - Discord @ Wavey#6948
 - Twitter @ItsWavey_
 - Words with friends dm's @ bussy_69420

