

# Introduction to CTFs

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# Overview

- What is a CTF?
- What will we do?

# What is a CTF?

CTF

Capture The Flag

# What is a flag?

A string of text that will be hidden in some way that we must find.

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A string of text that will be hidden in some way that we must find.  
`ctfNameOrFlag{s0m3_j0k3_!n_133t-sldfj382043}`

# Useful background knowledge

- Linux
- Networking
- Read code
- Python
- C
- Algebra, Trig.

# Categories:

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- Cryptography



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- Cryptography
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- Web Exploitation
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- Reverse Engineering
- Misc.

# Cryptography

# Cryptography

- lots of math
- scripting
- encryption method
- ciphers
- different bases





- Wireshark
- Google-fu

# Web Exploitation

- HTML/CSS
- JavaScript
- PHP
- Burp Suite

# Binary Exploitation

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- C
- pwntools

# Reverse Engineering

# Reverse Engineering

- assembly
- programming structure
- memory layout
- Radare2/IDA
- gdb/pwndbg or some other debugger

# Potential Jobs

- Pen tester
- Bug bounty
- Defensive security
- Really any programming or web design



# Outline:

- Today: Introduction
- Next time: Introduction to ethics, and intro to python
- Introduction to Linux
- Cryptography
- Forensics
- Web Exploitation
- Binary Exploitation
- Reverse Engineering

# Questions?

# Contact

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