

CTF

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What is a CTF?

- CTF = Capture The Flag competition
- Teams of hackers compete to find a **flag** hidden in an image, application, website, etc.
 - The flag is a string of text of a specific format depending on the CTF.
 - E.g. picoCTF{this_is_a_flag}
- It involves increasingly difficult challenges with proportional rewards
- After a set time limit (usually 1-3 days), the team with the most points wins

Let's play a CTF!

- Go to <https://2018game.picoctf.com>
- Create an account
- Activate account
- Log in
- Go to Profile (click the score on the top-right)
- Join classroom:
 - **Classroom Name:** CuriousU 2019
 - **Teacher Username:** ionita
- Go to **Problems** and try to solve the first few challenges

Tips

- Check the Hints for each challenge
- Google is your friend
- Useful online tools:
 - Base converter: <https://www.coolmathgames9.com/base>
 - ASCII converter: <https://www.branah.com/ascii-converter>
- Click the Shell menu item to run linux commands. Basic linux commands:

Command	Usage example	Effect
cd	cd /path/folder	Navigates to a directory (folder)
ls	ls	Lists the contents of the current directory
./	./program	Runs a program
grep [options] [pattern] [file]	grep 'text' file.txt	Searches a file for a given pattern
nc	nc 192.168.1.1 4321	Opens a connection
strings	strings file	Print the strings of printable characters in a file

- If you want to continue at home, there are helpful tutorials here: <https://picoctf.com/resources>