# Maple Bacon in CTF Adventure Land

Welcome to Maple Bacon In CTF Adventure Land, a series of game challenges by Filip#4543 and woof#0800! A big shout-out to <a href="tel:ISpamAndHex">ISpamAndHex</a> for creating the original game engine!!!

Our Mascot, Maple has been teleported to CTF ADVENTURE LAND, a place with many dangers but also plenty of treasures. Can you help Maple explore the world and obtain all of the flags?



The recommended progression order for the Maple Bacon in CTF Adventure Land challenge series would be to clear challenges 1 and 2 first, as later challenges require you to speedrun the game. If you are stuck on the first challenge, feel free to start on the second one. The first flag is NOT necessary to obtain the second flag. You do NOT need replay.txt for the first challenge in the series.

All flags for this series of challenges are in the standard format: maple{[a-zA-Z0-9\_!\-\?]+}. For challenge 2-5, if your submitted solution to the server (refer to instructions for challenge 2-5 near the bottom section of this page) matches the requirement of the challenge, our server will print out a flag for you to submit with the corresponding challenge number. Note that you can make whatever modifications to the game code locally to explore. However, when we validate your solutions on our servers, they will be run through the initial state of the game given in the starter file. Good luck!

### Installation:

Download the game here: players.zip

## Controls:

- Arrow keys to move
- Space bar to attack

## To run the game:

- Please ensure your version of Python is 3.6 or higher.
- In the players/ directory, run:
  - o pip install --upgrade pip
  - o pip install --user -r requirements.txt
    - Installs the required dependencies for the game to run!
  - o cd Game/
    - Change the working directory to be the Game folder! (Game must be run from this directory)
  - o python main.py
    - Prints the different modes of the game!
      - game: Launches the game! You only need this mode to find and submit flag #1.

- replay: Watch the replay of your replay.txt. You can open your replay file, copy all the contents by using ctrl + a or cmd + a, paste it in your terminal. If the replay does not start automatically, hit enter twice. You will need this for flag #2 and beyond. This is NOT the path to your replay.txt but the lines of 0s and 1s!
- check: Checks your solution to the challenge locally. You can open your replay file, copy all the contents by using ctrl + a or cmd + a, and paste it into your terminal. If the checking process does not start automatically, hit enter twice. You will need this for flag #2 and beyond.
- e.g., to run the game, run python main.py game
- NOTE: the game needs to be run from an environment that supports graphical interfaces. E.g., the game can't run in WSL (Windows Subsystem for Linux) if it doesn't support GUI apps.

## Submitting solutions for challenges 2-5:

- The moves you make during the game will be saved to players/Game/replay.txt. Note that this file will be overwritten every time you run the game, so make sure to make backups of replays you're happy with!
- From this challenge onwards, you'll need to submit your replay.txt file to our server for verification.
- Before submitting to the server, you can (and please) check your solution locally with python main.py check, this is the command we use on the server side.
  - o E.g., on Linux/Mac cat replay.txt | python main.py check
- After the server verifies your solution, if it matches the requirement of the challenge, a flag (or multiple flags) will be printed for you to submit on the MapleCTF website. There should be a flag number along with the flag so you know where to submit it to.

#### Linux/Mac

Linux/Mac users can use the command cat replay.txt | nc challenges.ctf.maplebacon.org 32023

#### Windows

Windows users can use the Microsoft Telnet client.

1. This requires that you enable the telnet client.

Control Panel -> Programs and Features -> Turn Windows Features on or off -> Telnet Client

• If the above method does not work or takes too long, you can also try running Windows Powershell or Command Prompt as administrator and run

dism /online /Enable-Feature /FeatureName:TelnetClient

- 2. In your terminal, type telnet challenges.ctf.maplebacon.org 32023
- 3. A message should print asking you to input your replay file. Paste your replay.txt just like how you have when you tested it locally.

## Troubleshooting:

- In case you are having trouble activating orb stations, try:
  - Run towards the orb station so that Maple is running against the station
  - o then, crouch and hold for a while. The station should activate.
- If your solution is correct when run through the checker locally but the server says otherwise, message woof#0800

If you encounter any issues, feel free to message the challenge authors!

Lastly, please do not redistribute the game or our Maple sprites for commercial purposes!

## Challenge Descriptions for archive purposes:

## CTF Adventure Land 1

Welcome to the first of many challenges in the game series. For this challenge, the mischievous creatures of CTF ADVENTURE LAND have left behind a message for Maple on the wall. Can you find it?

Game files, controls, and detailed instructions can be found on the dedicated page here.

Please submit a flag following the regex maple{[a-zA-Z0-9\_!\-\?]+}. You do NOT need replay.txt for this challenge.

Authors: Filip#4543 and woof#0800

## CTF Adventure Land 2

Maple lost all of their precious flags while searching for the important message! The mischievous creatures have hidden the flags around their land. Can you recover them?

From this challenge onwards, you'll need to submit your replay.txt file to our server for verification. Check out the bottom section of the <u>dedicated page</u> for more instructions.

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### CTF Adventure Land 3

Time is of utmost importance!
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### CTF Adventure Land 4

It's time to start breaking the rules, we need those flags quick! Authors: Filip#4543 and woof#0800

### CTF Adventure Land 5

Help Maple push beyond the limitations of physics!

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