frontrunning-2.md 3/8/2023

# Frontrunning Attacks Exercise 2

# Intro

There is a new lucrative referral program for a DEFI perpetual protocol.

When you refer someone you get from the protocol a comission of 50% from the user's trading fees.

The referral system is implemented using a Referrals.sol smart contract.

Can you frontrun users and "steal" their referral code?

## Accounts

- 0 Deployer & Owner
- 1 User
- 2 Attacker (You)

# **Tasks**

#### Task 1

Using Ethers, find a way to listen to the pending transactions that are being sent to the contract.

### Task 2

Find a way to get the transaction data of the pending transaction.

#### Task 3

Find a way to frontrun the user's transaction and steal his referral code so it will be yours.

# **Useful Link**

**Hardhat Mining Modes**