replay-attack-1.md 2/23/2023

# Replay Attack Exercise 1

# Intro

You withdrew 1 ETH from a centralized exchange to your wallet.

When you looked at the withdrawal transaction, you realized that it was from a multi-signature wallet smart contract.

Looking at the transaction, you noticed that two signatures were sent to the function:

## Signature 1:

```
{
    r: '0x02efb15972bac0ba578c0f95623bd95d10ca5f601d1d999308187e7dae738733',
    s: '0x213c76c501b9d9d5d4e81215ba15f1feb6e78be070dbca257f2b61d163e84255',
    v: 28,
}
```

#### Signature 2:

```
{
    r: '0x132e7ee1157ea4d2638187b2244202d8088a39cc7293a6895dfdf7fcfd3172ae',
    s: '0x18146aa45b156b100b280a91da1df53b533d7ec4e7d2c1740d0fe0e031ef8056',
    v: 28,
}
```

There's 100 ETH in this wallet right now. Can you get it all?

## Accounts

- 0 Deployer & Signer 1
- 1 Signer 2
- 2 Attacker (You)

## **Tasks**

Task 1

Drain all the MultiSig wallet ETH!

### Task 2

Make sure the MultiSig wallet is secured so that future attacks won't be possible.

Test the attack and make sure it failed, you may change the before section for this task.