**Module 1 - Assignment**

**Questions**

*\*Adjust the response space according to what you need.*

*\* For answers that include data to be answered via Metamask or Etherscan, include a screenshot, of the full screen, so that the facilitator can read the data on the screen, including the URL address of the web page.*

1. What is the address of your new account? In addition to giving the answer include a screenshot. Also include a screenshot so that the facilitator can see, in the sale of the "Rinkeby Faucet", the URL of the Tweet or Facebook post that contains your wallet account address.

Graphical user interface

Description automatically generated

Graphical user interface, text, application, email

Description automatically generated

1. What is the hexadecimal code of your name? In addition to giving the answer, include a screenshot.

496e646572

Graphical user interface, text

Description automatically generated

1. As far as you can see, which block was last mined? In addition to giving the answer, include a screenshot.

[10609704](https://rinkeby.etherscan.io/block/10609704)  
Graphical user interface, text

Description automatically generated

1. How many transactions does block 7278837 have? In addition to giving the answer, include a screenshot.

12 transactions

Graphical user interface, text, application, email

Description automatically generated

1. How many "contract transactions" does block 7278837 have? In addition to giving the answer, include a screenshot.

10 contract internal transactions

Graphical user interface, table

Description automatically generated with medium confidence

1. What is the "difficulty" of block 7278837? In addition to giving the answer, include a screenshot.

Difficulty level is 1

Graphical user interface, text, application, email

Description automatically generated

1. What is the address of the miner who has mined block 7278837? In addition to giving the answer, include a screenshot.

0x42EB768f2244C8811C63729A21A3569731535f06

Graphical user interface, text, application

Description automatically generated

1. On the account you are researching at Etherscan, what can you notice about the owner? Based on data such as whether or not the account has a name, how much Ether it has, or what transactions it has been involved in, do you think the account belongs to a mining pool or an individual miner? What other predictions can be made about the account? In addition to giving the answer, include a screenshot.

Owner is no name its account balance is 7,542**.**82802561922597327 Ether and last block is [10609773](https://rinkeby.etherscan.io/block/10609773)

Graphical user interface, application

Description automatically generated

Graphical user interface, application, Teams

Description automatically generated

1. In the transaction you have opened, what is the hash of the transaction? In addition to giving the answer, include a screenshot.

0x2d4aae477faa3336d8313bf41fe455516cd69e116dd77eeb76e620146677029c

Graphical user interface, text, application, email

Description automatically generated

1. In the transaction you have opened, how much Ether has been transferred? In addition to giving the answer, include a screenshot.
   1. ether

Graphical user interface, text, application, email

Description automatically generated

1. What is the value of this Ether in US dollars? In addition to giving the answer, include a screenshot.

0.00USD

Graphical user interface, text, application, email

Description automatically generated

1. How much was the transaction fee for this transaction (in Ether)? In addition to giving the answer, include a screenshot.

0**.**000667870822731 Ether

Graphical user interface, text, application, email

Description automatically generated

1. What is the value of this transaction fee (it may be a fraction of a cent)? In addition to giving the answer, include a screenshot.

0.00USD  
Graphical user interface, text, application, email

Description automatically generated

1. From what you can see in this chart, what is the time between blocks in the Ethereum network? In addition to giving the answer, include a screenshot.

Under one minute

Graphical user interface, application

Description automatically generated

1. After a stable increase in time between blocks, the two dates with abrupt decreases are October 16, 2017 and February 28, 2019. Investigate these two dates in the Ethereum's history. Why are they important? What caused there to be an increase and, suddenly, a decrease in time between blocks?

Courtesy of ethereum.org/en/history

**2017**

**Byzantium**

 Oct-16-2017 05:22:11 AM +UTC  
🧱 Block number: [4,370,000](https://etherscan.io/block/4370000)  
 ETH price: $334.23 USD  
 [ethereum.org on waybackmachine](https://web.archive.org/web/20171017201143/https:/www.ethereum.org/)

**Summary**

The Byzantium fork:

* Reduced block [mining](https://ethereum.org/en/developers/docs/consensus-mechanisms/pow/mining/) rewards from 5 to 3 ETH.
* Delayed the [difficulty bomb](https://ethereum.org/en/glossary/#difficulty-bomb) by a year.
* Added ability to make non-state-changing calls to other contracts.
* Added certain cryptography methods to allow for [layer 2 scaling](https://ethereum.org/en/developers/docs/scaling/#layer-2-scaling).

**Constantinople**

 Feb-28-2019 07:52:04 PM +UTC  
🧱 Block number: [7,280,000](https://etherscan.io/block/7280000)  
 ETH price: $136.29 USD  
 [ethereum.org on waybackmachine](https://web.archive.org/web/20190415163751/https:/www.ethereum.org/)

**Summary**

The Constantinople fork:

* Ensured the blockchain didn't freeze before [proof-of-stake was implemented](https://ethereum.org/en/history/#beacon-chain-genesis).
* Optimised the [gas](https://ethereum.org/en/glossary/#gas) cost of certain actions in the [EVM](https://ethereum.org/en/developers/docs/ethereum-stack/#ethereum-virtual-machine).
* Added the ability to interact with addresses that haven't been created yet.