

## Tp N°0

Answers for Ethereum assignment depend to site <https://etherscan.io/>

### 1. Question 1

Inspect and explore block #4390176 to solve the below question.

What is the previous block hash of block #4390176 in Ethereum Blockchain? Every block contain the hash of the previous block, in this case the hash of previous block corresponds to the parent hash

0xc253f0917b33b2947b4d9cdb7ad656cc0233ef1781984384284f3a91810a8a36

Hash:	0x77245e866785d61fcd99b637b5a705c65208bb6dcac6860754d3ee74b6a5a132
Parent Hash:	0xc253f0917b33b2947b4d9cdb7ad656cc0233ef1781984384284f3a91810a8a36

### 2. Question 2

Inspect and explore block #4390176 to solve the below question.

What is the total difficulty for block #4390176 in Ethereum Blockchain?

The Total Difficulty represents the sum of the difficulty of all blocks mined up to this one. It is a measure of the total amount of computing power that is equal to 1,226,797,074,502,984,598,563

Difficulty:	1,462,196,725,068,910
Total Difficulty:	1,226,797,074,502,984,598,563

### 3. Question 3

Inspect and explore the transaction with the hash

"0x5edb69874d0900d8857468fbe53715cc1a58137709b8b70e46299bf10983dc09" the ethers transferred in this transaction correspond to the value that is equal to 913.268

Approximately, how many Ethers are transferred in this transaction?

- 4434720 ethers
- 0.00042 ethers
- 21000 ethers
- 913.268 ethers

Transaction Hash:	0x5edb69874d0900d8857468fbe53715cc1a58137709b8b70e46299bf10983dc09
Status:	Success
Value:	913.26840646995791384 ETH \$2,770,810.94
Transaction Fee:	0.00042 ETH \$1.27
Gas Price:	20 Gwei (0.00000002 ETH)

### 4. Question 4

Inspect and explore the transaction with the hash

"0x5edb69874d0900d8857468fbe53715cc1a58137709b8b70e46299bf10983dc09". The address is the address of sender that forward the transaction, correspond to From that represent 0xF9fbA58d8345b03100c5AdF3b8B51938E5dA0a9D

What is the address of the sender in this transaction?

From:	0xF9fbA58d8345bD3100C5AdF3b8B51938E5dA0a9D
To:	0xFf1b354670E3502145c097bcD2d1F3f17B648e63

### 5. Question 5

Which of the following is true about an externally owned account (EOA) in Ethereum Homestead?

- EOAs have associated code with them.
- EOAs execute code when triggered by a transaction.
- **EOAs can send transactions (ether transfer or invoke a contract code)**

### 6. Question 6

External Owned Accounts (EOA) are controlled by \_\_\_\_\_. For control signature we use the private key

- Public Key and Private Key
- Public Key
- Hash of the first transaction by that account
- **Private Key**

### 7. Question 7

What is the differentiating factor between the Ethereum Blockchain and the Bitcoin blockchain?

- **Smart contracts**
- Distributed ledger
- Wallets
- Currency Exchange

### 8. Question 8

Calculate the amount of gas points required to execute an operation that involves 2 steps and 1 load from memory. Use the following image.

Operation name	Gas Cost
Step	1
Load from memory	20
Store into memory	100
Transaction base fee	21000
Contract creation	53000
...	...

- 1
- **22**
- 42
- 23

### 9. Question 9

What is the correct sequence involved in a block creation:

1. Transactions validated
  2. Transactions Bundled & broadcasted
  3. Transaction initiated
  4. Block added to the local chain and propagated to the network.
  5. Proof of work consensus problem solved
- **3,1,2,5,4**
  - 3,2,1,4,5
  - 1,2,3,4,5
  - 5,3,1,2,4