BLOCKCHAIN TECHNOLOGY

Home Assignment

Name: Himani Verma

Admission No: U19CS075

Q1. Block 0 of Bitcoin blockchain is known as genesis block.

https://www.blockchain.com/btc/block/0

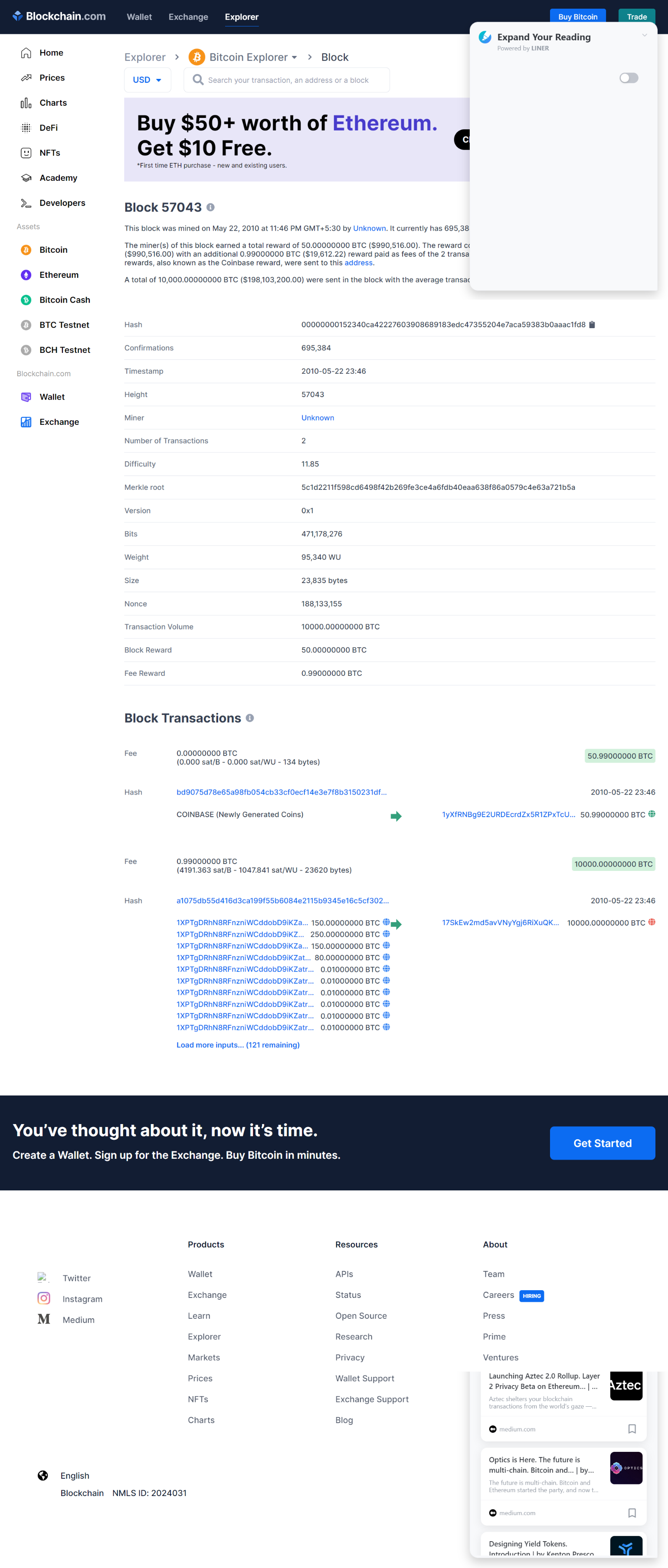
How many transactions are there in the Genesis block? What is the coin base reward and what address is the beneficiary?

Ans: The genesis block has only 1 transaction and the coinbase reward for this block was 50 Bitcoins and the address which received it was 1A1zP1eP5QGefi2DMPTfTL5SLmv7DivfNa.

Q2. For the bitcoin blockchain block number 57043, report the number of transactions included in

the block and its significant details.

Ans: There were only 2 transactions in block number 57043. One of the transactions was just the coinbase reward of 50.99 BTC and the other transaction was the first recorded purchase of a physical good using bitcoin. Laszlo Hanyecz paid 10000 BTC to purchase 2 Papa John’s Pizza. Hence 22 May is celebrated as the Pizza Day in the Crypto Community.



Q3. Multiply Last 3 digits of your Admission ID with 9999, use modulo 751000 and resultant number is a block of your question of bitcoin blockchain.

For this block, report the following parameters:

Timestamp:

No. of transaction included:

Total bitcoins sent in the block:

Difficulty:

Coinbase reward:

Fee reward:

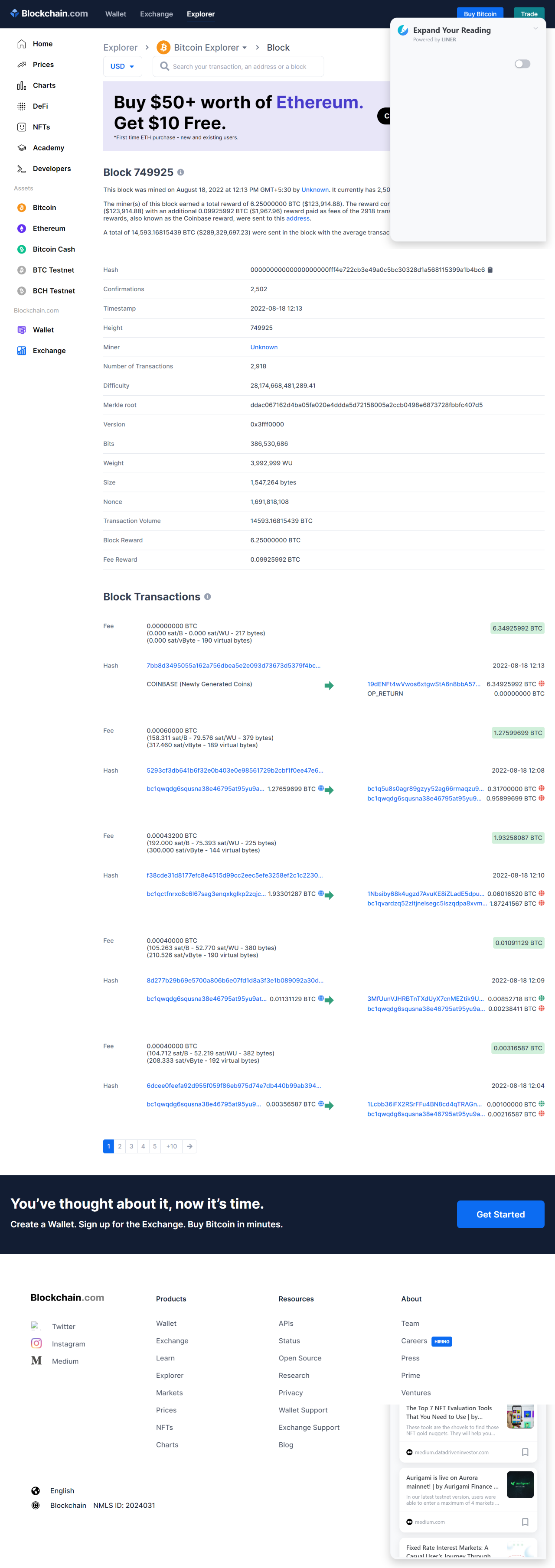
Nonce:

Merkle Root:

Ans: My Admission no is 75

Hence 75\*9999 = 7,49,925

749925 modulo 751000 gives 749925 itself. So my designated block for the bitcoin network will be block number 749925.



Q4. Multiply Last 3 digits of your Admission ID with 99999, use modulo 15000000 and resultant

number is a block number of your question of ethereum blockchain.

(https://www.blockchain.com/eth/block/blocknumber)

For this block, report the following parameters:

Timestamp:

No. of transaction included:

Total ethers sent in the block:

Difficulty:

Block Reward:

Fee Reward:

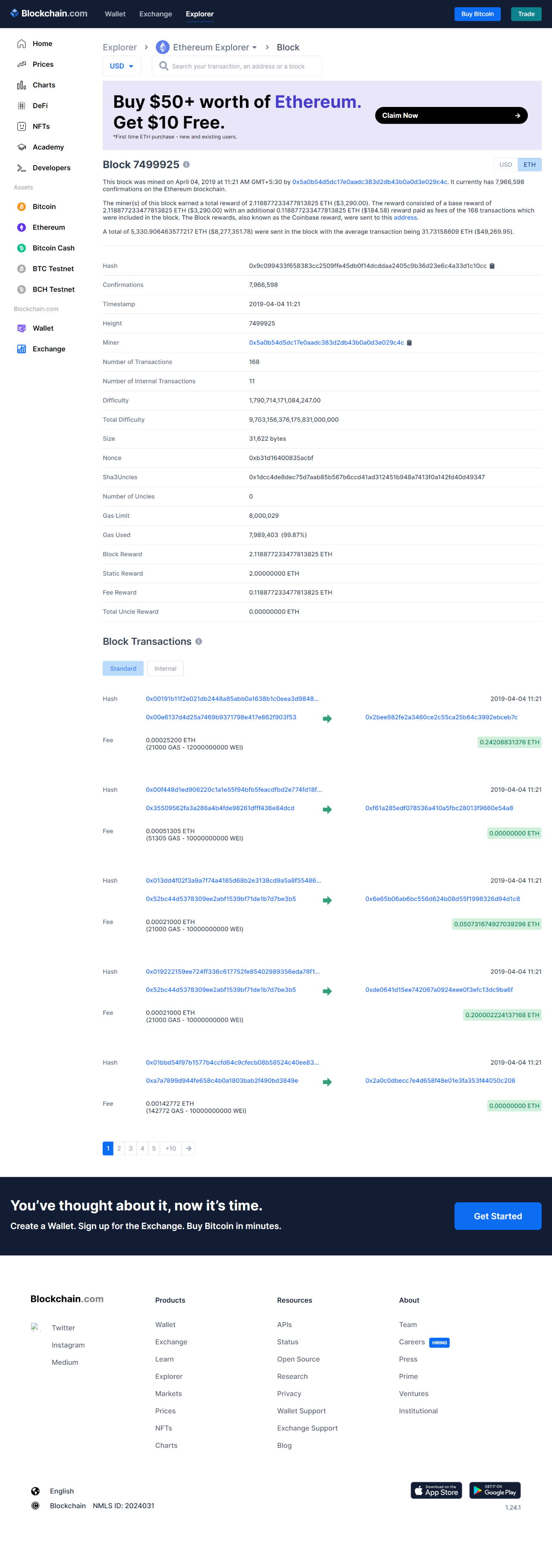
Gas used:

Nonce:

Ans: My Admission no is 75

Hence 75\*99999 = 74,99,925

74,99,925 < 15000000 hence modulo operator not required



Transaction Volume: 5,330.906463577217 ETH

A total of 5,330.906463577217 ETH ($8,272,820.50) were sent in the block with the average transaction being 31.73158609 ETH ($49,242.98).