



Explore the Bitcoin Ledger

(Student Version)

Corresponding Material

Cryptocurrency and Bitcoin videos, and connection resources.

Discussion

We've learned about Bitcoin and how it is built on a technology called blockchain which is a distributed, digital public ledger. Let's see how a transaction actually looks on Bitcoin!

Class Exercise

Recall that a public ledger is one benefit of cryptocurrencies. With a public ledger, anyone can inspect the history of transactions using the cryptocurrency. Let's explore a few transactions now! This is the ID of the transaction we will be looking at:

1Archive1n2C579dMsAu3iC6tWzuQJz8dN

We'll use the Block Explorer tool at Blockchain.com to dig into a few Bitcoin transactions.

We're going to explore this transaction:

<https://www.blockchain.com/btc/tx/886dca8adab499c542f8266491e31c4cffcd875f5fd9fca329f876a49eefb6e1>

This transaction involved one account sending Bitcoin to another account. The sender has the ID of **13RWHNtHp2DbgSjc6ZP8y9swFg7nHwsXqe** and the recipient has ID **1Archive1n2C579dMsAu3iC6tWzuQJz8dN**.

1. When did this transaction occur? (Hint: "Received time" is the date of the transaction.)
2. How much bitcoin did 13RWH... send to 1Archive1...? (Hint: Look for the arrow on the page that points between sender and receiver and the amount sent will be to the right of that.)
3. Did 13RWH... send any other Bitcoin as part of this transaction?
yes
 - a. If so, how much, and to whom?



CodeHS

4. Click on the ID of the sender.

Transaction View information about a bitcoin transaction

886dca8adab499c542f8266491e31c4c4cfd875f5fd9fca329f876a49eefb6e1

13RWHNtHp2DbgSjc6ZP8y9swFg7nHwsXqe → 1Archive1n2C57... (Internet Archive) 18LSvLHY3AZ6r4fR2ws2TYrftX6HeFaKQL

0.00020898 BTC
0.00399472 BTC
0.0042037 BTC

- How many transactions have they completed?
 - How much BTC were involved? (Hint: "Total Received")
 - Do they have any BTC left over?
 - When was this user's first transaction? (Hint: Scroll down to the bottom.)
- Now let's go back and look at the recipient (Click the back arrow on your browser). Click on the recipient's address. Even though Bitcoin is "anonymous," you can verify your account and make yourself public, if you so desire. Who is this recipient in this transaction (Hint: It's in large bold letters at the top.)?
 - How much total money in BTC did the Internet Archive receive for this transaction (Go back to the "Transaction" page and hover over the number of BTC sent just to Internet Archive OR check out the green button.)?
 - How much total money in current US Dollars did the Internet Archive receive on the day of the transaction? (Hint: Hover over the green BTC total transaction amount button.)
 - How much total money in current US Dollars is that same transaction worth today? (Hint: Use a Bitcoin to USD currency converter online like UnitConverters.net: <https://www.unitconverters.net/currency/btc-to-usd.htm>)
 - Use the Block Explorer tool at Blockchain.com to explore some more transactions. What other features or details do you observe? Explain.