

## Bitcoin Transaction Chain

- Please create a transaction chain

Transaction	Transaction ID
<ul style="list-style-type: none"><li>○ Alice (address: A1) already had 0.2000 BTC which was purchased from Joe (address: J1) in a previous transaction (ID 1111).</li><li>○ Alice (address: A1) pays 0.1700 BTC to buy a book from Eve (address: E1).</li></ul>	1234
<ul style="list-style-type: none"><li>○ Eve (address: E1) pays 0.0145 BTC to buy coffee from Bob (address: B1)</li></ul>	2345
<ul style="list-style-type: none"><li>○ Bob (address: B1) pays 0.0085 BTC to buy sugar from Jack (address: J1)</li></ul>	4567

- The inputs of each transaction should have
  - Current Transaction ID
  - Previous Transaction ID
  - The buyer's Name
  - The buyer's Bitcoin Address
  - BTC
- The outputs of each transaction should have
  - For each output
    - The seller's Bitcoin Address
    - BTC

- If there is a change, the change is returned to the buyer indicated by the buyer's Bitcoin Address
- Transaction Fees
  - Set all the transaction fee to be 0.0003 BTC

Ans:

Transaction 1111

<u>INPUTS From</u>		<u>OUTPUTS To</u>	
From(previous transaction Joe has received )		Output#0 A1	0.2000 BTC(spent)
Joe	0.2003 BTC	Transaction Fess:	0.0003 BTC
Address: J1			

Transaction 1234

<u>INPUTS From</u>		<u>OUTPUTS To</u>	
1111		Output#0 E1	0.1700 BTC(spent)
Alice	0.2000 BTC	Output#1 A1(change)	0.0297 BTC(unspent)
Address: A1		Transaction Fess:	0.0003 BTC

Transaction 2345

<u>INPUTS From</u>		<u>OUTPUTS To</u>	
1234		Output#0 B1	0.0145 BTC(spent)
Eve	0.1700 BTC	Output#1 E1(change)	0.1552 BTC(unspent)
Address: E1		Transaction Fess:	0.0003 BTC

Transaction 4561

<u>INPUTS From</u>		<u>OUTPUTS To</u>	
2345		Output#0 J1	0.0085 BTC(spent)
Bob	0.0145 BTC	Output#1 B1(change)	0.0057 BTC(unspent)
Address: B1		Transaction Fess:	0.0003 BTC