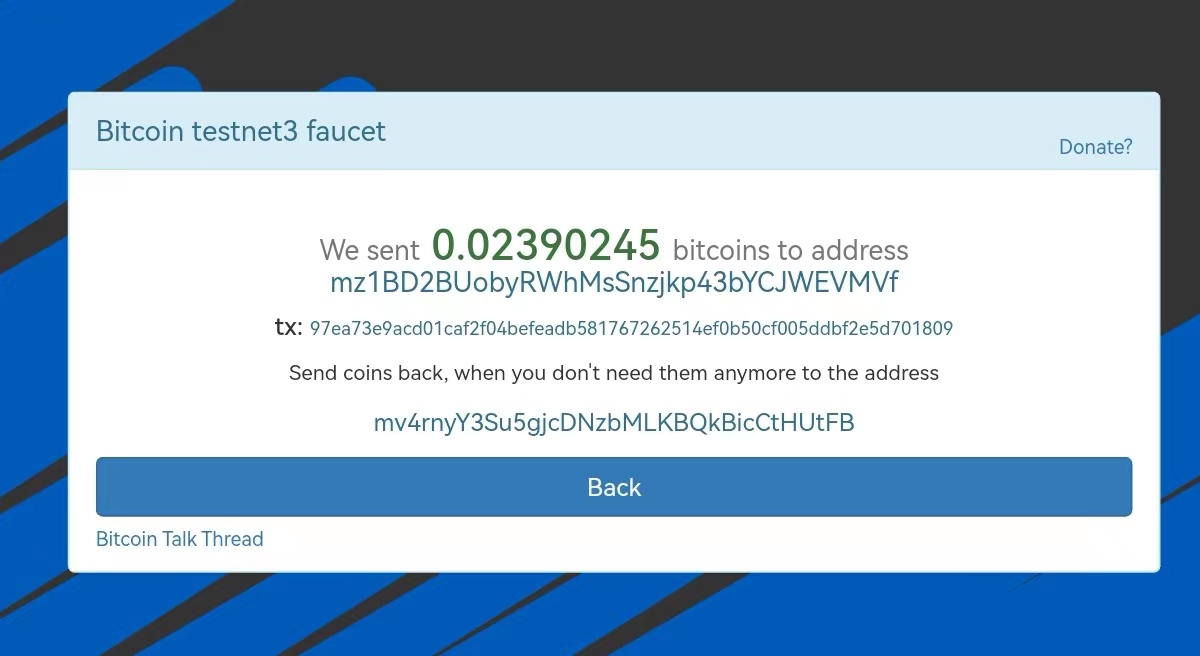
区块链第一次实验报告

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【实验过程】

1. 使用keygen.py生成一个testnet私钥和地址，在faucet（<https://coinfaucet.eu/en/btctestnet/>）粘贴得到的地址，得到一些testnet BTC：



Private key: cQf8sE9fhMtF6gBCv8Kb5Q7cPgcDvUm4VDGc3TDRKKiEbRekKdap

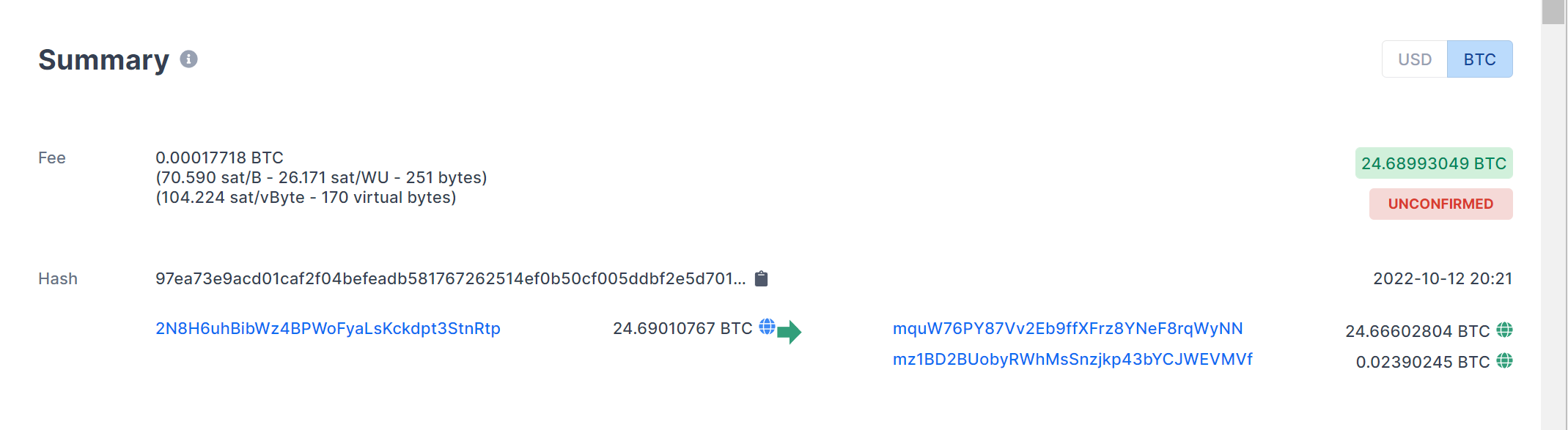
Address:

mz1BD2BUobyRWhMsSnzjkp43bYCJWEVMVf

交易哈希值：

97ea73e9acd01caf2f04befeadb581767262514ef0b50cf005ddbf2e5d701809

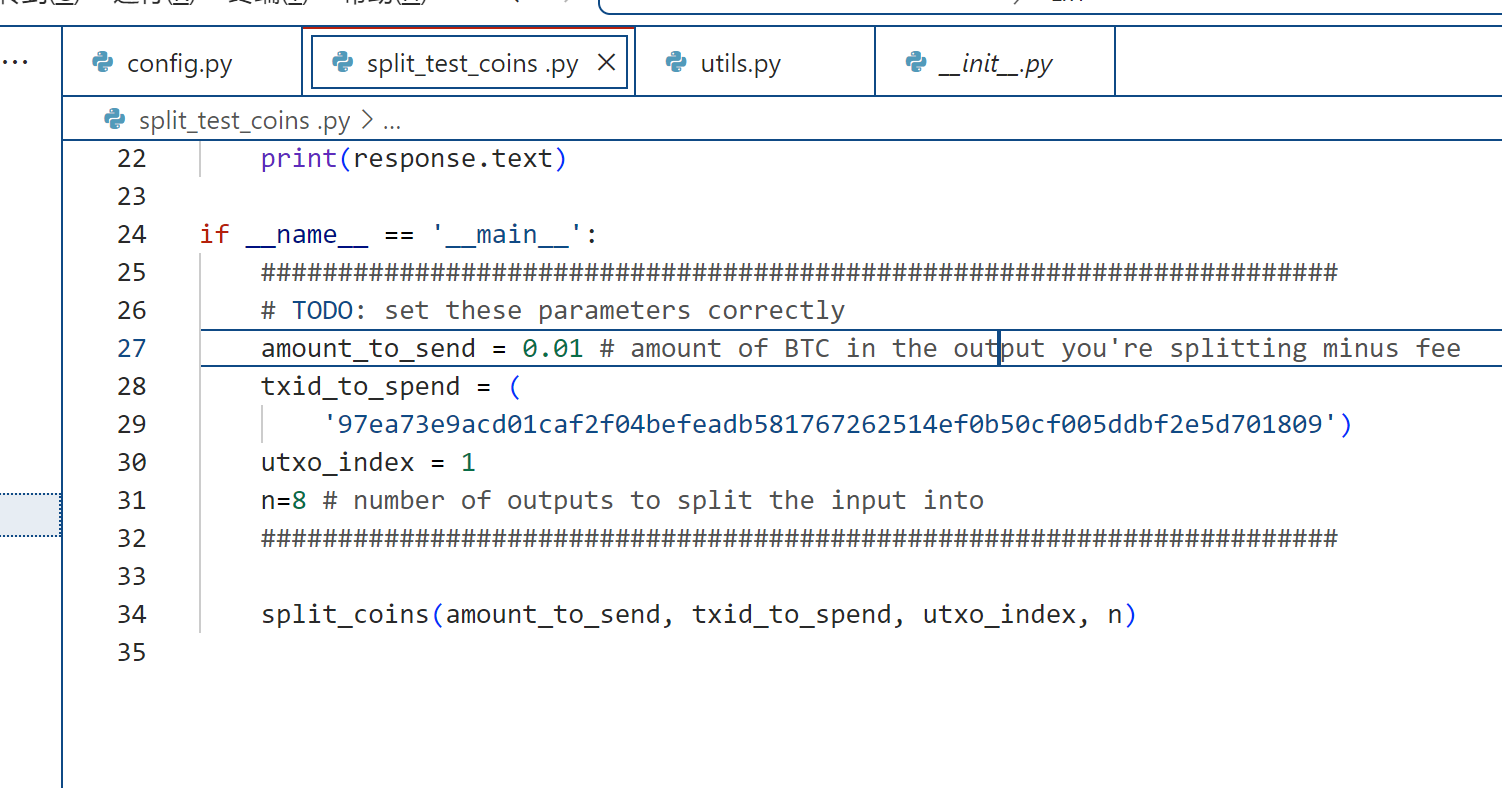
1. 将上一步得到的交易哈希值在[www.blockchain.com/btc-testnet](http://www.blockchain.com/btc-testnet)网址中查询交易，可以得到结果如下



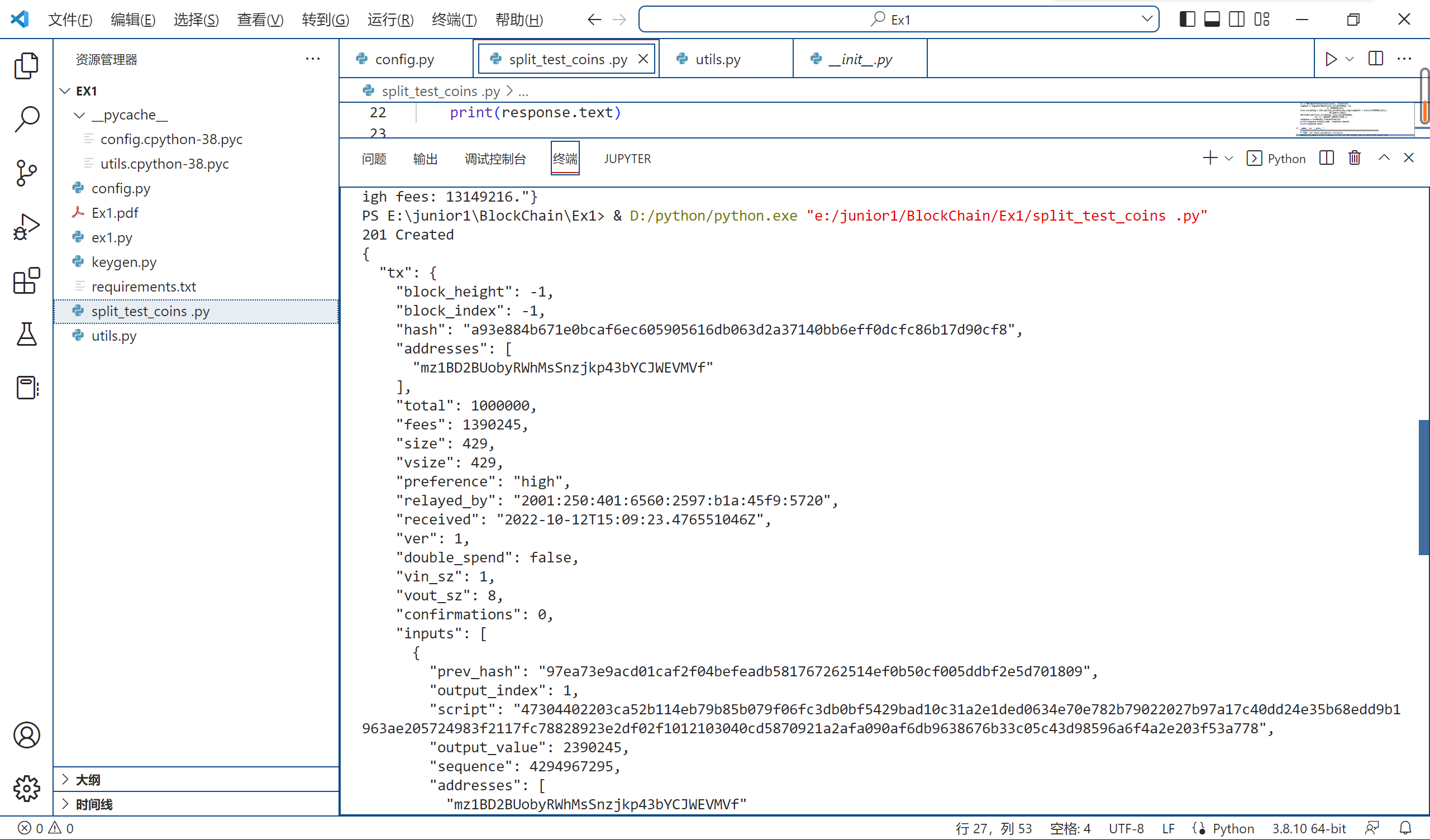
1. 修改config.py文件，将my\_private\_key修改为第一步中得到的私钥。



1. 修改split\_test\_coins.py文件，txid为第二步中得到的哈希值；将第一步中得到的比特币中的0.01平均分为8份（n），使用第二个输出（utxo\_index=1）

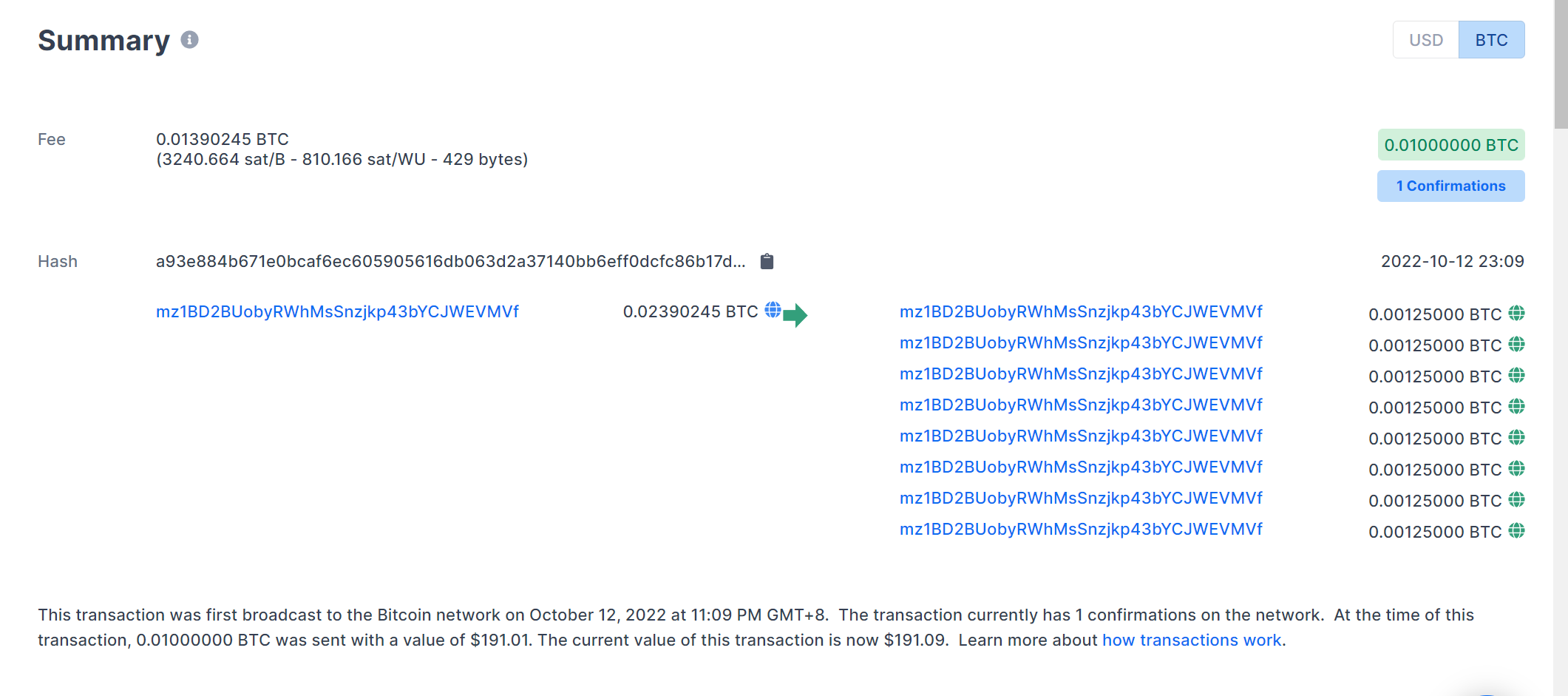


运行结果：

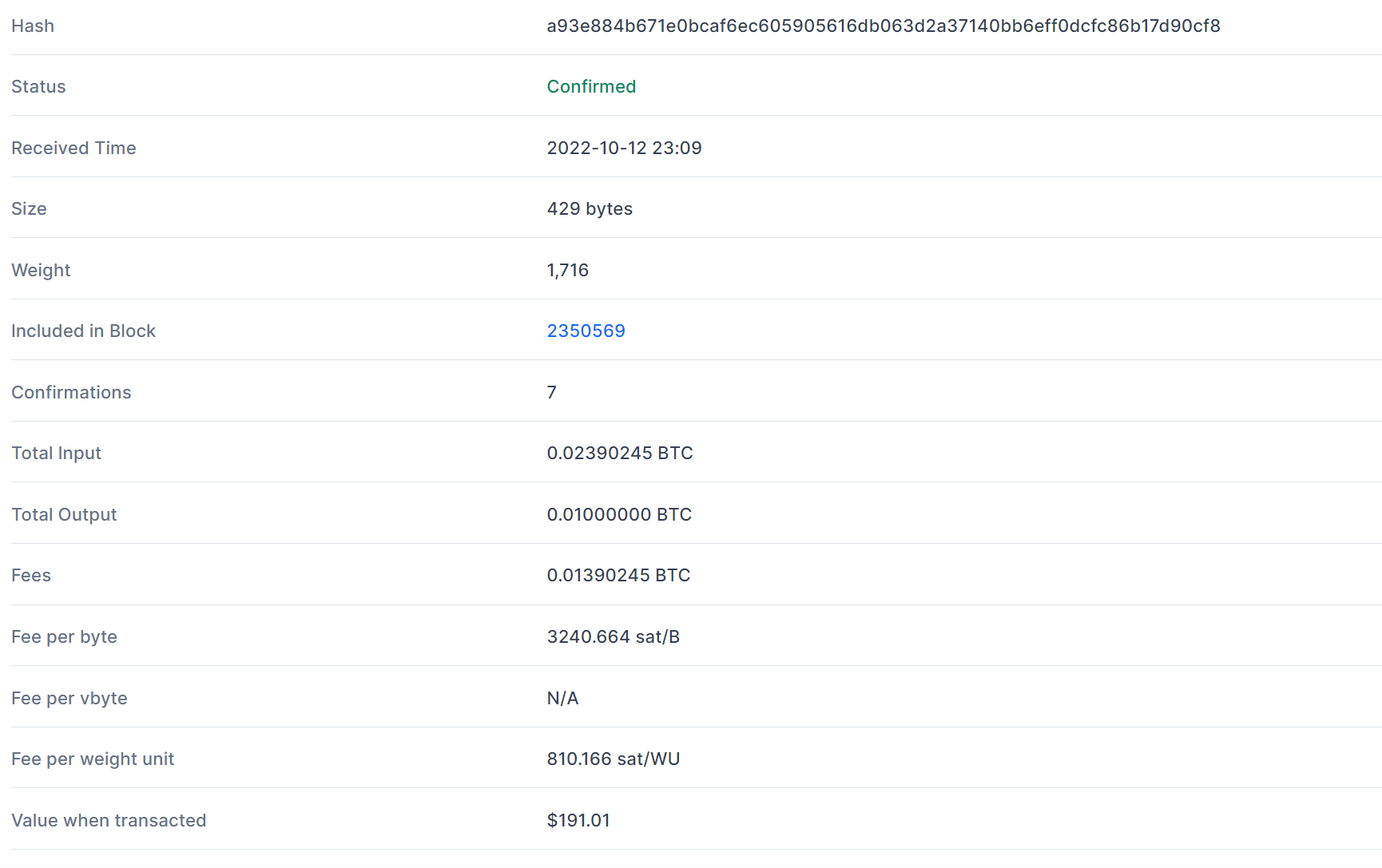


|  |
| --- |
| 201 Created  {  "tx": {  "block\_height": -1,  "block\_index": -1,  "hash": "a93e884b671e0bcaf6ec605905616db063d2a37140bb6eff0dcfc86b17d90cf8",  "addresses": [  "mz1BD2BUobyRWhMsSnzjkp43bYCJWEVMVf"  ],  "total": 1000000,  "fees": 1390245,  "size": 429,  "vsize": 429,  "preference": "high",  "relayed\_by": "2001:250:401:6560:2597:b1a:45f9:5720",  "received": "2022-10-12T15:09:23.476551046Z",  "ver": 1,  "double\_spend": false,  "vin\_sz": 1,  "vout\_sz": 8,  "confirmations": 0,  "inputs": [  {  "prev\_hash": "97ea73e9acd01caf2f04befeadb581767262514ef0b50cf005ddbf2e5d701809",  "output\_index": 1,  "script": "47304402203ca52b114eb79b85b079f06fc3db0bf5429bad10c31a2e1ded0634e70e782b79022027b97a17c40dd24e35b68edd9b1963ae205724983f2117fc78828923e2df02f1012103040cd5870921a2afa090af6db9638676b33c05c43d98596a6f4a2e203f53a778",  "output\_value": 2390245,  "sequence": 4294967295,  "addresses": [  "mz1BD2BUobyRWhMsSnzjkp43bYCJWEVMVf"  ],  "script\_type": "pay-to-pubkey-hash",  "age": 2350553  }  ],  "outputs": [  {  "value": 125000,  "script": "76a914cac8b0c1c960ee6b2771613dcb3ea962f7575f8c88ac",  "addresses": [  "mz1BD2BUobyRWhMsSnzjkp43bYCJWEVMVf"  ],  "script\_type": "pay-to-pubkey-hash"  },  {  "value": 125000,  "script": "76a914cac8b0c1c960ee6b2771613dcb3ea962f7575f8c88ac",  "addresses": [  "mz1BD2BUobyRWhMsSnzjkp43bYCJWEVMVf"  ],  "script\_type": "pay-to-pubkey-hash"  },  {  "value": 125000,  "script": "76a914cac8b0c1c960ee6b2771613dcb3ea962f7575f8c88ac",  "addresses": [  "mz1BD2BUobyRWhMsSnzjkp43bYCJWEVMVf"  ],  "script\_type": "pay-to-pubkey-hash"  },  {  "value": 125000,  "script": "76a914cac8b0c1c960ee6b2771613dcb3ea962f7575f8c88ac",  "addresses": [  "mz1BD2BUobyRWhMsSnzjkp43bYCJWEVMVf"  ],  "script\_type": "pay-to-pubkey-hash"  }  ]  }  } |

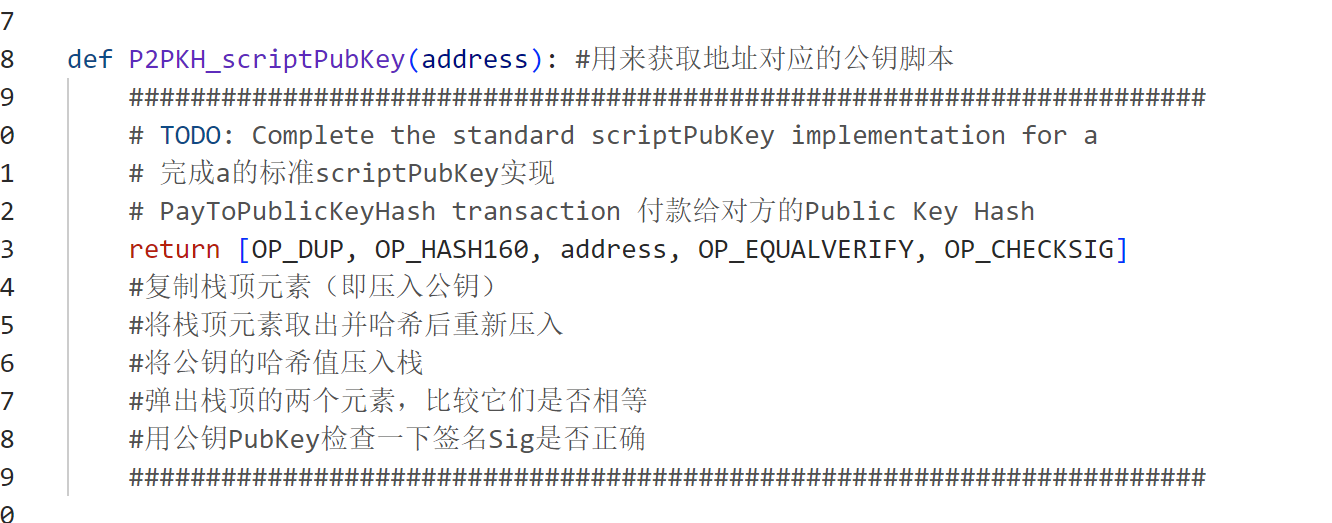
按照该哈希值进行交易查询，结果如下：



分币成功交易截图：



1. 修改ex1.py文件，具体修改如下：



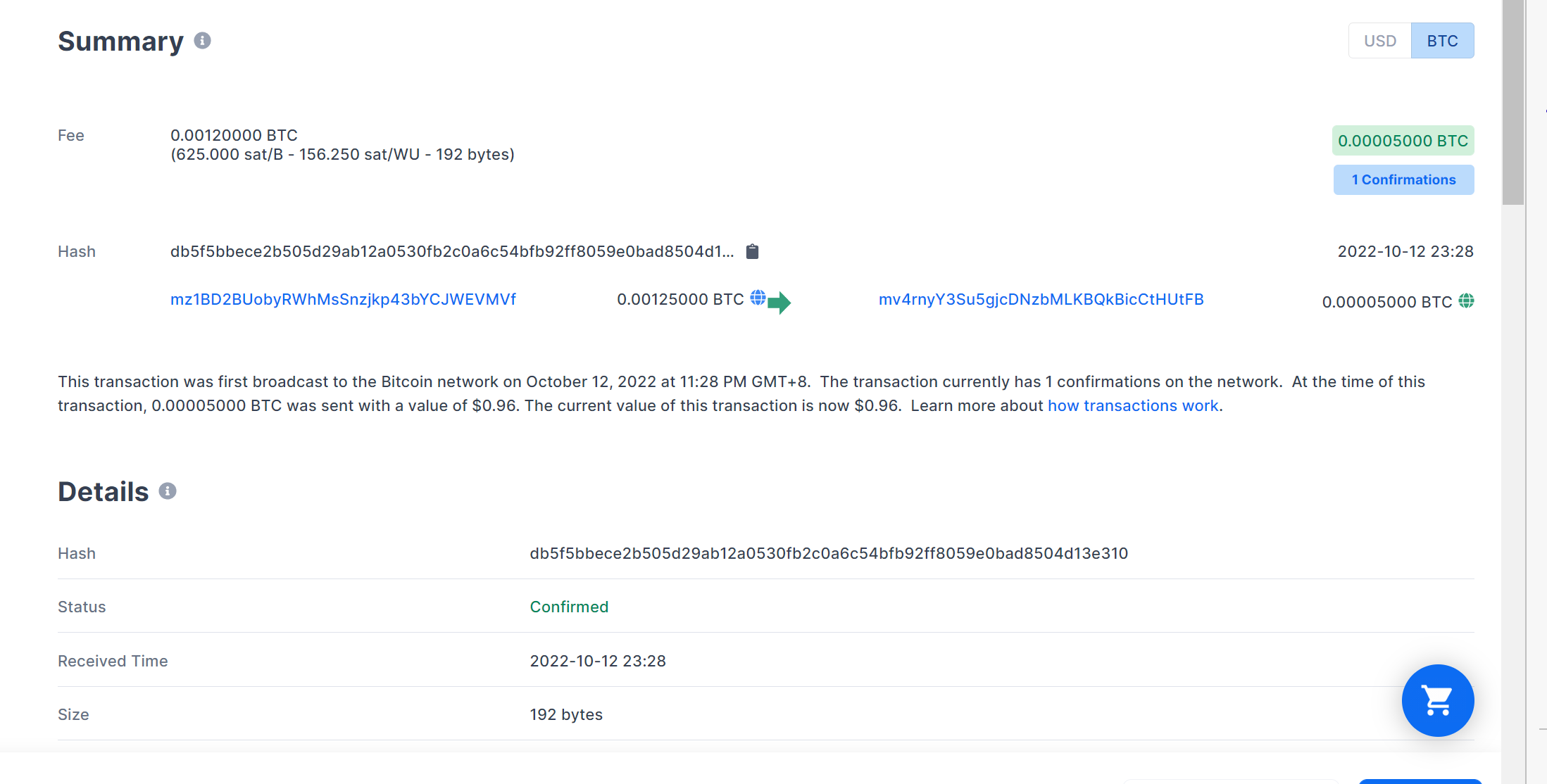


1. 取出第一份进行试验（故设置utxo\_index=0），运行如下：



|  |
| --- |
| 201 Created  {  "tx": {  "block\_height": -1,  "block\_index": -1,  "hash": "db5f5bbece2b505d29ab12a0530fb2c0a6c54bfb92ff8059e0bad8504d13e310",  "addresses": [  "mz1BD2BUobyRWhMsSnzjkp43bYCJWEVMVf",  "mv4rnyY3Su5gjcDNzbMLKBQkBicCtHUtFB"  ],  "total": 5000,  ]  }  } |

1. 查询该交易结果：



发币成功截图：

