```
import requests
import pandas as pd
```

## Ether Balance - single address

```
requests.get('https://api.etherscan.io/api?module=account&action=balance&address=0x4976a4a02f38326660d17bf34b431dc6e2eb2327&tag=latest&apikey
```

```
{'status': '1', 'message': 'OK', 'result': '646440735391260760359958'}
```

## Normal Transactions List

```
data = requests.get('https://api.etherscan.io/api?module=account&action=txlist&address=0xddbd2b932c763ba5b1b7ae3b362eac3e8d40121a&startblock=
data = pd.DataFrame(data['result'])
data.tail().T
```

|  | 5 |  |
| --- | --- | --- |
| blockNumber | 101773 |  |
| timeStamp | 1439827863 |  |
| hash | 0x70bc1a43c9e80caae6b69fe845ba1567826413a8e42d... | 0xf0ee803e14( |
| nonce | 5 |  |
| blockHash | 0xe802363e95a7e4700058c64f308ff726eba63ec7a400... | 0x4b55bddbcea |
| transactionIndex | 5 |  |
| from | 0x1a56a50c378d21d0aa544ed9a482300c7f6e78ec | 0xddbd2b |
| to | 0xddbd2b932c763ba5b1b7ae3b362eac3e8d40121a | 0xc9875 |
| value | 84512559000000000000000 |  |
| gas | 21000 |  |
| gasPrice | 100000000000 |  |
| isError | 0 |  |
| txreceipt_status |  |  |
| input | 0x |  |
| contractAddress |  |  |
| cumulativeGasUsed | 126000 |  |
| gasUsed | 21000 |  |
| confirmations | 16872762 |  |
| methodId | 0x |  |
| functionName |  |  |

## ERC20 Token transfer events

```
erc20 = pd.DataFrame(requests.get('https://api.etherscan.io/api?module=account&action=tokentx&contractaddress=0x9f8f72aa9304c8b593d555f12ef65
erc20.head().T
```

|                  | 0 |  |
|------------------|---|---|
| blockNumber      | 4730207 |  |
| timeStamp        | 1513240363 |  |
| hash             | 0xe8c208398bd5ae8e4c237658580db56a2a94dfa0ca38... | 0x9c82e89b7f6 |
| nonce            | 406 |  |
| blockHash        | 0x022c5e6a3d2487a8ccf8946a2ffb74938bf8e5c8a3f6... | 0x87a4d04a6d8 |
| from             | 0x642ae78fafbb8032da552d619ad43f1d81e4dd7c | 0x4e8336 |
| contractAddress  | 0x9f8f72aa9304c8b593d555f12ef6589cc3a579a2 | 0x9f8f7 |
| to               | 0x4e83362442b8d1bec281594cea3050c8eb01311c | 0x69076e |
| value            | 5901522149285533025181 |  |
| tokenName        | Maker |  |
| tokenSymbol      | MKR |  |
| tokenDecimal     | 18 |  |
| transactionIndex | 81 |  |
| gas              | 940000 |  |

## Contracts

```
requests.get('https://api.etherscan.io/api?module=contract&action=getabi&address=0xBB9bc244D798123fDe783fCc1C72d3Bb8C189413&apikey=A1C15S3AXQ
```

```
'[{"constant":true,"inputs":[{"name":"","type":"uint256"}],"name":"proposals","ou
tputs":[{"name":"recipient","type":"address"},{"name":"amount","type":"uint256"},
{"name":"description","type":"string"},{"name":"votingDeadline","type":"uint25
6"},{"name":"open","type":"bool"},{"name":"proposalPassed","type":"bool"},{"nam
e":"proposalHash","type":"bytes32"},{"name":"proposalDeposit","type":"uint256"},
{"name":"newCurator","type":"bool"},{"name":"yea","type":"uint256"},{"name":"na
y","type":"uint256"},{"name":"creator","type":"address"}],"type":"function"},{"co
nstant":false."inputs":[{"name":" spender"."type":"address"}.{"name":" amount"."t
```

## Transactions

```
requests.get('https://api.etherscan.io/api?module=transaction&action=gettxreceiptstatus&txhash=0x513c1ba0bebf66436b5fed86ab668452b7805593c050
```

```
{'status': '1', 'message': 'OK', 'result': {'status': '1'}}
```

## Block

```
requests.get('https://api.etherscan.io/api?module=block&action=getblockreward&blockno=2165403&apikey=A1C15S3AXQHQ7PVVDX63VVK2IBAECS448Z').jso
```

```
{'status': '1',
 'message': 'OK',
 'result': {'blockNumber': '2165403',
  'timeStamp': '1472533979',
  'blockMiner': '0x13a06d3dfe21e0db5c016c03ea7d2509f7f8d1e3',
  'blockReward': '5314181600000000000',
  'uncles': [{'miner': '0xbcdfc35b86bedf72f0cda046a3c16829a2ef41d1',
    'unclePosition': '0',
    'blockreward': '3750000000000000000'},
   {'miner': '0x0d0c9855c722ff0c78f21e43aa275a5b8ea60dce',
    'unclePosition': '1',
    'blockreward': '3750000000000000000'}],
  'uncleInclusionReward': '312500000000000000'}}
```

## Logs

```
logs = pd.DataFrame(requests.get('https://api.etherscan.io/api?module=logs&action=getLogs&fromBlock=379224&toBlock=latest&address=0x339901226
logs.tail().T
```

| | 365 | |
|---|---|---|
| address | 0x33990122638b9132ca29c723bdf037f1a891a70c | 0x33990122 |
| topics | [0xf63780e752c6a54a94fc52715dbc5518a3b4c3c2833... | [0xf63780e752c6a |
| data | | |
| blockNumber | 0x18df11 | |
| blockHash | 0x4e8ce9e93e37817c9c653f04f207f8cf822cf2b049f2... | 0xb8c337586eb40c |
| timeStamp | 0x57502078 | |
| gasPrice | 0x4a817c800 | |
| gasUsed | 0x104c2 | |
| logIndex | 0x | |
| transactionHash | 0xe8b0588b803621a50d4eccbb71e2f9463c0d6c267e6d... | 0x84d0668ff085c8 |
| transactionIndex | 0x | |

## GETH/Parity Proxy

```
requests.get('https://api.etherscan.io/api?module=proxy&action=eth_getStorageAt&address=0x6e03d9cce9d60f3e9f2597e13cd4c54c55330cfd&position=0
```

```
{'jsonrpc': '2.0',
 'id': 1,
 'result': '0x0000000000000000000000000000000000000000000000000000000000000000'}
```

## Token data

```
requests.get('https://api.etherscan.io/api?module=stats&action=tokensupply&contractaddress=0x57d90b64a1a57749b0f932f1a3395792e12e7055&apikey=
```

```
{'status': '1', 'message': 'OK', 'result': '21265524714464'}
```

## Gas data

```
requests.get('https://api.etherscan.io/api?module=gastracker&action=gasestimate&gasprice=2000000000&apikey=A1C15S3AXQHQ7PVVDX63VVK2IBAECS448Z
```

```
{'status': '1', 'message': 'OK', 'result': '3615'}
```

## Stats

```
requests.get('https://api.etherscan.io/api?module=stats&action=ethsupply2&apikey=A1C15S3AXQHQ7PVVDX63VVK2IBAECS448Z').json()
```

```
{'status': '1',
 'message': 'OK',
 'result': {'EthSupply': '122373866217800000000000000',
  'Eth2Staking': '11205873521644140000000000',
  'BurntFees': '3050035195547082238775916'}}
```