

Problem: Write a blockchain data processing application

A file of Ethereum log data is provided here consisting of a JSON array of log data objects. Each log describes an account sending tokens to another account and has the following data format:

```
{
  "token": STRING, // The token being transferred
  "sender": STRING, // The account that sent the tokens
  "recipient": STRING, // The account that received the tokens
  "value": NUMBER, // How many tokens were sent
  "timestamp": NUMBER // When the transfer happened in epoch time seconds
}
```

In Ethereum a Token is essentially a special account that stores balances for other accounts. The Token is also an addressable account and so it too can have balances, even for itself.

Your task is to write an application that will process this data and respond to basic queries about it.

In particular the application should expose an API which allows the following information to be discovered:

- The balance of an account for a token at a given time
- The average token transfer amount for a token
- The median token transfer amount for a token
- The account with the highest balance of a token at a given time
- The account which has made the most transfers of a token at a given time

NOTE: Transfers which come from a **null** account are considered “Mint” events. This means these tokens actually appear out of thin air. For example:

```
{
  "token": "0x23153665811704194fee22b9b182af8cc9624e05",
  "sender": null,
  "recipient": "0x23153665811704194fee22b9b182af8cc9624e05",
  "value": 100000,
  "timestamp": 1508458115
}
```

Would mean that token `0x23153665811704194fee22b9b182af8cc9624e05` has gained `100000` of its own tokens with no decrease in any other account.

You must write the application in Node.js. You may use any frameworks, libraries, or toolkits you see fit to accomplish the task.