Operating Systems
Assignment 1: mvote

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A hash table is implemented using the linear hashing algorithm. Each bucket in the hash table has a 2-dimensional Linked List. To be able to use the same structure for both 1D and 2D linked lists, there is an NDLinkedList structure that handles operations for both 1D and 2D linked lists.

Each node in the NDLinkedList is a DataNode and each node in the PostalLinkedList is a PostalNode. DataNode contains information about a voter and whether they have voted or not. PostalNode contains the zip and a list of DataNodes having voter information. Voters who have voted are only added to the PostalLinkedList.

To sort the linked list, a merge sort algorithm has been used.

How to run the program?
To build the executable, run the following command on your terminal:

```
make
```

Please note that 'make' needs to be installed on your system.

To run the executable, run the following command:

```
./mvote -f <input_file> -b <maxBucketSize>
```