

--> Instructions & Details <--

> Programming Language:

Python (v3.8.5)

> STEP 1: Create the Data File ("data/dataToIndex.txt")

usage: createData.py [-h] [-k K] [-n N] [-d D] [-m M] [-l L]

optional arguments:

- h, --help show this help message and exit
- k K Key list textfile (default: "data/keyFile.txt")
- n N Number of lines (default: 10)
- d D Maximum level of nesting (default: 3)
- m M Maximum number of keys / each value (default: 4)
- l L Maximum length of string value (default: 9)

> STEP 2: Start the servers - Store Data - Run Queries

usage: kvBroker.py [-h] [-s S] [-i I] [-k K]

optional arguments:

- h, --help show this help message and exit
- s S Server ip-port list (default: "data/serverFile.txt")
- i I Data to store (default: "data/dataToIndex.txt")
- k K Pick random k servers (default: 2)

> STEP 3: Run Queries

Options:

1. DELETE <top_level_key>
2. GET <top_level_key>
3. QUERY <top_level_key(.nested_key...nested_key)>
4. exit

e.g.

GET tlkey1

DELETE tlkey2

QUERY tlkey1.name.GPA

GET "tlkey3"

DELETE 'tlkey2'

> Notes

The keys can be either in quotes(double/single) or not and the separators between the command and the key/keypath can be either a single or multiple spaces/tabs