

Key-Value Server and Client

Your task is to implement a very simple key-value store server and a client program you can use to demonstrate the functionality of the server.

Environment

OS

Server and client should run on Linux.

Version Control

We use Git, so please use Git while developing.

Commit messages and patches will be also reviewed, so we will need the git tree. (You can send the .git dir, or create a GitLab account and setup a private gitlab repo what you can share with us at the end of the task.)

The Server

- • Should be implemented in Java
- • We need a Makefile, too.
- • Please, do not use any external libraries (not for even the data structure and socket lib). Only GNU libc is allowed.
- • Stores key-value pairs, *key* and *value* is an ASCII string, *key* contains only numbers and letters.
- • Provides the following operation to the clients:
 - ○ PUT *key value*: store a key-value pair
 - ○ GET *key* : retrieve a previously stored value for key
- • Should serve clients either on TCP or a Unix Domain Socket (depends on you).
- • Should be able to serve multiple clients concurrently. Key-space is shared between clients, a client can GET the value PUT by another client.
- • Correctness is more important than performance. It should be usable with a few thousand entries.

The Client

- We'd be happy to see a Python implementation, but if you don't know Python, feel free to choose any programming language you know and like. **For example Java.**
- Should provide an interface to put and get values (a simple command line interface is sufficient).

Extras

Please include all tests, README files -- and generally, all files you deem useful.