README

introduction

This is a command-line tool that will make an HTTP request to the URL and print the response directly to the console. It also provides functionality for users to measure the execution of the program.

It is implemented using socket to send HTTP GET request packet directly to the server without taking advantage of any external library for handling the HTTP request.

how to run the program

To run the program, you need to compile it first. To compile the code:

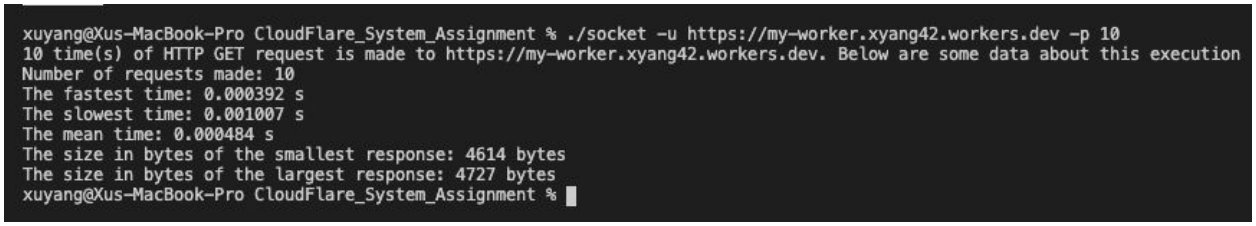
- go into this folder in terminal
- type in "gcc socket.c -o socket" command in the terminal

Then you are ready to run the program and explore the functionality:

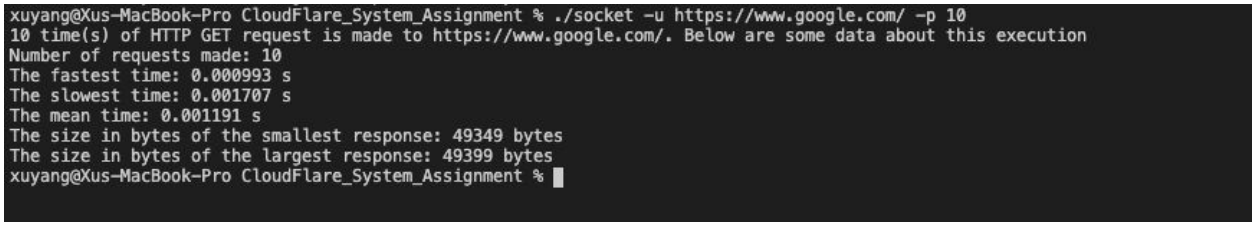
- type in "./socket -h" to see the document about how to use it
- type in "./socket -u <url>" to send HTTP GET request to the URL. For example, to test my website, enter the command: "./socket -u https://my-worker.xyang42.workers.dev" and "./socket -u https://my-worker.xyang42.workers.dev/links"
- type in "./socket -u <url> -p <positive_number>" to make the program requesting the URL a number of times and print out the measurement data. An example would be: "./socket -u https://my-worker.xyang42.workers.dev -p 10"

working example for the code

Below are screenshots of my tool running against my site and another site:
my website (https://my-worker.xyang42.workers.dev)



Google (https://www.google.com/)



I noticed the responding time is quite similar. That probably indicates Cloudflare makes it fast and easy for users to deploy their services on the internet.