TinyServer-main

来自《深入理解计算机系统》的一个功能简单的web服务器

克隆到本地后，现将TinyServer-main/cgi-bin/add.c编译,如果目录在cgi-bin下，编译命令就是: gcc -o add add.c

在tiny.c所在的目录下编译命令: gcc -o tiny tiny.o csapp.a -lpthread

接下来运行程序命令来启动服务器: ./tiny 8087

```
root@mzz-2016210289:~/TinyServer-main# ./tiny 8087
server start
```

另开一个终端当作客户端,运行命令: telnet localhost 8087

此时客户端连接上服务器了

```
root@mzz-2016210289:~# telnet localhost 8087
Trying ::1...
Trying 127.0.0.1...
Connected to localhost.
Escape character is '^]'.
```

服务器也显示有客户端连接上了

```
root@mzz-2016210289:~/TinyServer-main# ./tiny 8087
server start
Accept connection from (localhost,52784)
```

在客户端继续键入命令: GET /home.html HTTP/1.1来获取服务器目录下的静态文件home.html或者GET /cgi-bin/add?100&200 HTTP/1.1来运行一个CGI程序，这个程序实现100+200的计算，然后再按一次换行键。

服务器返回了结果

```
root@mzz-2016210289:~/TinyServer-main# ./tiny 8087
server start
Accept connection from (localhost,52784)
Request headers:
GET /home.html HTTP/1.1

Response headers:
HTTP/1.1 200 OK
Server:Tiny Web Server
Connection:close
Content-length:185
Content-type:text/html
```

可以看到客户端获得了静态文件home.html，并且服务器断了与客户端的连接

```
root@mzz-2016210289:~# telnet localhost 8087
Trying ::1...
Trying 127.0.0.1...
Connected to localhost.
Escape character is '^]'.
GET /home.html HTTP/1.1

HTTP/1.1 200 OK
Server:Tiny Web Server
Connection:close
Content-length:185
Content-type:text/html

<!DOCTYPE HTML>
<html>
    <head>
        <!--  metadata goes here   -->
        <title>Example</title>
    </head>
    <body>
        <em>Hello World</em>
    </body>
</html>
Connection closed by foreign host.
```

可以看到客户端获得了服务器运行的CGI程序的结果

```
root@mzz-2016210289:~# telnet localhost 8087
Trying ::1...
Trying 127.0.0.1...
Connected to localhost.
Escape character is '^]'.
GET /cgi-bin/add?100&200 HTTP/1.1

HTTP/1.1 200 OK
Server:Tiny Web Server
nContent-length: 113
Content-type: text/html

welcome to add.com: THE Internet addition portal.
<p>The answer is: 100 + 200 = 300
<p>Thanks for visiting !
Connection closed by foreign host.
```