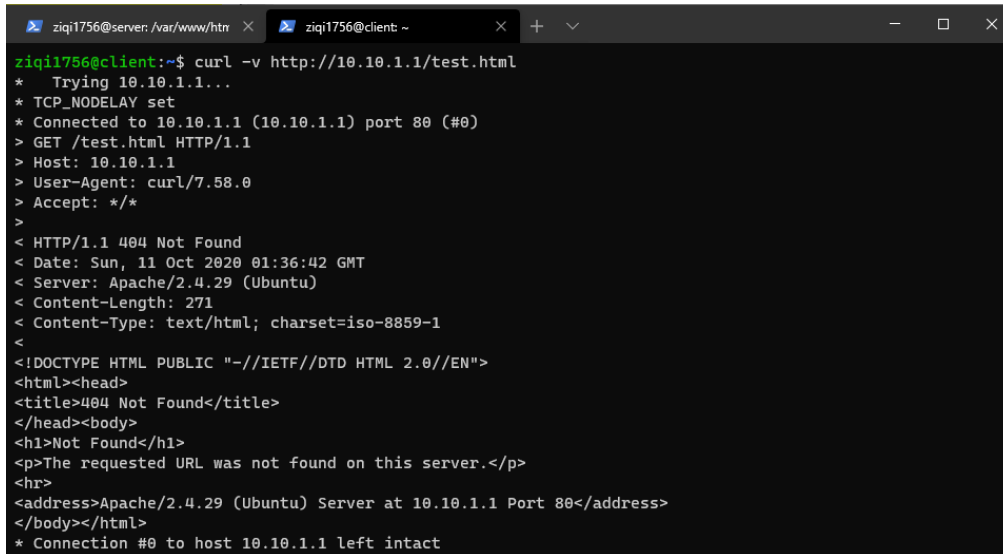


CS 655 Computer network

Lab 6 — HTTP Server

Ziqi Tan
U 88387934

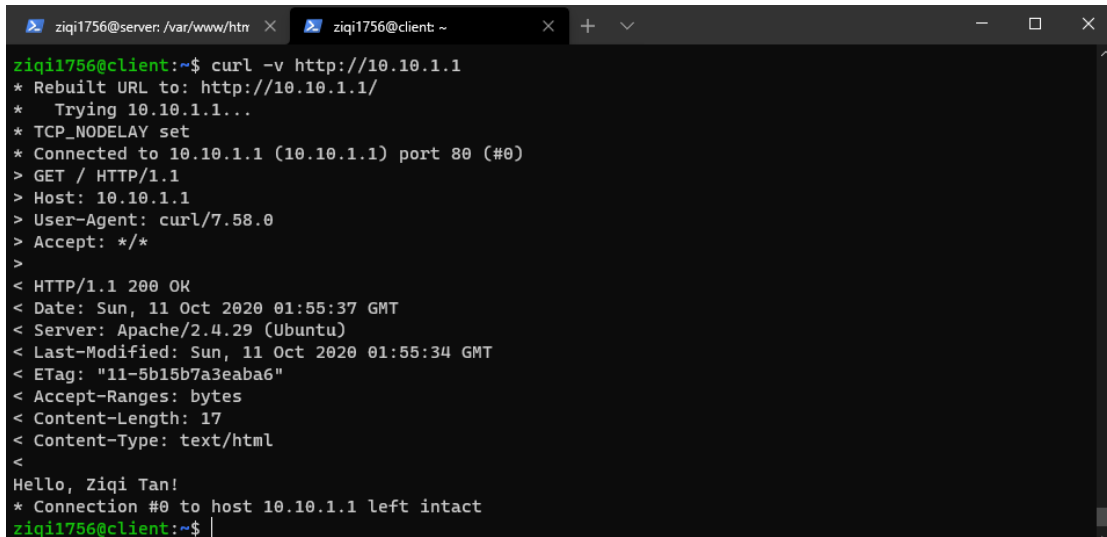
Question 1: What was the output of the above command and why? Provide screenshots.



```
ziqi1756@server: /var/www/html x ziqi1756@client: ~ x + v
ziqi1756@client:~$ curl -v http://10.10.1.1/test.html
* Trying 10.10.1.1...
* TCP_NODELAY set
* Connected to 10.10.1.1 (10.10.1.1) port 80 (#0)
> GET /test.html HTTP/1.1
> Host: 10.10.1.1
> User-Agent: curl/7.58.0
> Accept: */*
>
< HTTP/1.1 404 Not Found
< Date: Sun, 11 Oct 2020 01:36:42 GMT
< Server: Apache/2.4.29 (Ubuntu)
< Content-Length: 271
< Content-Type: text/html; charset=iso-8859-1
<
<!DOCTYPE HTML PUBLIC "-//IETF//DTD HTML 2.0//EN">
<html><head>
<title>404 Not Found</title>
</head><body>
<h1>Not Found</h1>
<p>The requested URL was not found on this server.</p>
<hr>
<address>Apache/2.4.29 (Ubuntu) Server at 10.10.1.1 Port 80</address>
</body></html>
* Connection #0 to host 10.10.1.1 left intact
```

Question 2: What was the output of the above command and why? Provide screenshots.4

Create my own index.html without correct html format.



```
ziqi1756@server: /var/www/html x ziqi1756@client: ~ x + v
ziqi1756@client:~$ curl -v http://10.10.1.1
* Rebuilt URL to: http://10.10.1.1/
* Trying 10.10.1.1...
* TCP_NODELAY set
* Connected to 10.10.1.1 (10.10.1.1) port 80 (#0)
> GET / HTTP/1.1
> Host: 10.10.1.1
> User-Agent: curl/7.58.0
> Accept: */*
>
< HTTP/1.1 200 OK
< Date: Sun, 11 Oct 2020 01:55:37 GMT
< Server: Apache/2.4.29 (Ubuntu)
< Last-Modified: Sun, 11 Oct 2020 01:55:34 GMT
< ETag: "11-5b15b7a3eaba6"
< Accept-Ranges: bytes
< Content-Length: 17
< Content-Type: text/html
<
Hello, Ziqi Tan!
* Connection #0 to host 10.10.1.1 left intact
ziqi1756@client:~$
```

Create my own index file without .html suffix.

```
zqi1756@server: /var/www/htr  x  zqi1756@client: ~  x  +  v  -  □  x
zqi1756@client:~$ curl -v http://10.10.1.1
* Rebuilt URL to: http://10.10.1.1/
* Trying 10.10.1.1...
* TCP_NODELAY set
* Connected to 10.10.1.1 (10.10.1.1) port 80 (#0)
> GET / HTTP/1.1
> Host: 10.10.1.1
> User-Agent: curl/7.58.0
> Accept: */*
>
< HTTP/1.1 200 OK
< Date: Sun, 11 Oct 2020 01:57:21 GMT
< Server: Apache/2.4.29 (Ubuntu)
< Vary: Accept-Encoding
< Content-Length: 742
< Content-Type: text/html; charset=UTF-8
<
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 3.2 Final//EN">
<html>
<head>
<title>Index of /</title>
</head>
<body>
<h1>Index of /</h1>
<table>
<tr><th valign="top"></th><th><a href="?C=N;O=D">Name</a></th>
<th><a href="?C=M;O=A">Last modified</a></th><th><a href="?C=S;O=A">Size</a></th><th><a href="?C=D;O=A">Description</a></th></tr>
<tr><th colspan="5"><hr></th></tr>
<tr><td valign="top"></td><td><a href="index">index</a></td><td align="right">2020-10-10 21:57 </td><td align="right"> 17 </td><td>&nbsp;</td></tr>
<tr><th colspan="5"><hr></th></tr>
</table>
<address>Apache/2.4.29 (Ubuntu) Server at 10.10.1.1 Port 80</address>
</body></html>
* Connection #0 to host 10.10.1.1 left intact
zqi1756@client:~$ |
```

Question 3: Create your own correctly formatted HTML document in place of the message in index.html. Follow the same procedure as above to retrieve this document. Take a screenshot!

```
zqi1756@server: /var/www/htr  x  zqi1756@client: ~  x  +  v  -  □  x
zqi1756@client:~$ curl -v http://10.10.1.1
* Rebuilt URL to: http://10.10.1.1/
* Trying 10.10.1.1...
* TCP_NODELAY set
* Connected to 10.10.1.1 (10.10.1.1) port 80 (#0)
> GET / HTTP/1.1
> Host: 10.10.1.1
> User-Agent: curl/7.58.0
> Accept: */*
>
< HTTP/1.1 200 OK
< Date: Sun, 11 Oct 2020 02:02:58 GMT
< Server: Apache/2.4.29 (Ubuntu)
< Last-Modified: Sun, 11 Oct 2020 02:02:36 GMT
< ETag: "7f-5b15b9364f0e6"
< Accept-Ranges: bytes
< Content-Length: 127
< Vary: Accept-Encoding
< Content-Type: text/html
<
<!DOCTYPE html>
<html lang="en">
<head>
<title>Lab http server</title>
</head>
<body>
<h1>Hello, Ziqi!</h1>
</body>
</html>
* Connection #0 to host 10.10.1.1 left intact
zqi1756@client:~$ |
```

Question 4: You've learned that HTTP has many different status codes. By modifying your requests made from the client machine you already observed two of them, explain briefly what do they mean and explain 2 more status codes by reading up on http.

404: page not found. The page that you want to find in the server does not exist.

200: OK. The page is fetched from the server successfully.

500: server internal error.

401: not authorized. You have not login or the priority to access the page.