

LABORATORIO 5

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PARTE I

1. Abra una terminal Linux o consola de comandos Windows.
2. Realice una conexión síncrona TCP/IP a través de Telnet/Netcat al siguiente servidor:
 - Host: www.escuelaing.edu.co
 - Puerto: 80

Teniendo en cuenta los parámetros del comando telnet:

telnet HOST PORT

3. Antes de que el servidor cierre la conexión por falta de comunicación:
 - Revise la página 36 del RFC del protocolo HTTP, sobre cómo realizar una petición GET. Con esto, solicite al servidor el recurso 'sssss/abc.html', usando la versión 1.0 de HTTP.
 - Asegúrese de presionar ENTER dos veces después de ingresar el comando.
 - Revise el resultado obtenido. ¿Qué código de error sale?, revise el significado del mismo en la lista de códigos de estado HTTP.

```
felipe@felipe-Latitude-5480:~$ telnet www.escuelaing.edu.co 80
Trying 54.237.133.81...
Connected to stark-cherimoya-jg38tzhyu4qth9c744i6vz0y.herokudns.com.
Escape character is '^]'.
GET /sssss/abc.html HTTP/1.0
Host: escuelaing.edu.co

HTTP/1.1 301 Moved Permanently
Connection: close
Server: unicorn
Date: Fri, 04 Mar 2022 22:46:03 GMT
Content-Type: text/html; charset=utf-8
Location: https://escuelaing.edu.co/sssss/abc.html
X-Content-Type-Options: nosniff
Referrer-Policy: same-origin
Via: 1.1 vegur

Connection closed by foreign host.
```

- ¿Qué otros códigos de error existen?, ¿En qué caso se manejarán?

Existen diferentes códigos entre el 100 y el 599 los cuales se dividen en:

1. Respuestas Informativas (100)
2. Respuestas Satisfactorias (200)
3. Redirecciones (300)
4. Errores del cliente (400)
5. Errores del servidor (500)

4. Realice una nueva conexión con telnet, esta vez a:

- Host: www.httpbin.org
- Puerto: 80
- Versión HTTP: 1.1

Ahora, solicite (GET) el recurso `/html`. ¿Qué se obtiene como resultado?

```
felipe@felipe-Latitude-5480:~$ telnet www.httpbin.org 80
Trying 3.209.99.235...
Connected to www.httpbin.org.
Escape character is '^]'.
GET /html HTTP/1.1
Host: httpbin.org

HTTP/1.1 200 OK
Date: Fri, 04 Mar 2022 22:52:48 GMT
Content-Type: text/html; charset=utf-8
Content-Length: 3741
Connection: keep-alive
Server: unicorn/19.9.0
Access-Control-Allow-Origin: *
Access-Control-Allow-Credentials: true

<!DOCTYPE html>
<html>
  <head>
  </head>
  <body>
    <h1>Herman Melville - Moby-Dick</h1>
```

5. Seleccione el contenido HTML de la respuesta y copielo al cortapapeles CTRL-SHIFT-C. Ejecute el comando `wc` (*word count*) para contar palabras con la opción `-c` para contar el número de caracteres:

```
felipe@felipe-Latitude-5480: ~
e had been an artisan of famed excellence, and with plenty to do; owned a house
and garden; embraced a youthful, daughter-like, loving wife, and three blithe, r
uddy children; every Sunday went to a cheerful-looking church, planted in a grov
e. But one night, under cover of darkness, and further concealed in a most cunni
ng disguisement, a desperate burglar slid into his happy home, and robbed them a
ll of everything. And darker yet to tell, the blacksmith himself did ignorantly
conduct this burglar into his family's heart. It was the Bottle Conjuror! Upon t
he opening of that fatal cork, forth flew the fiend, and shrivelled up his home.
Now, for prudent, most wise, and economic reasons, the blacksmith's shop was in
the basement of his dwelling, but with a separate entrance to it; so that alway
s had the young and loving healthy wife listened with no unhappy nervousness, bu
t with vigorous pleasure, to the stout ringing of her young-armed old husband's
hammer; whose reverberations, muffled by passing through the floors and walls, c
ame up to her, not unsweetly, in her nursery; and so, to stout Labor's iron lull
aby, the blacksmith's infants were rocked to slumber. Oh, woe on woe! Oh, Death,
why canst thou not sometimes be timely? Hadst thou taken this old blacksmith to
thysself ere his full ruin came upon him, then had the young widow had a delicio
us grief, and her orphans a truly venerable, legendary sire to dream of in their
after years; and all of them a care-killing competency.
  </p>
</div>
</body>
</html>3741
```

Claro está, las peticiones GET son insuficientes en muchos casos. Investigue: ¿Cuál es la diferencia entre los verbos GET y POST?

La diferencia es que un get solo pide información mientras que un post le envía información al servidor.

6. En la práctica no se utiliza telnet para hacer peticiones a sitios web sino el comando curl con ayuda de la línea de comandos:

```
curl www.httpbin.org
```

Utilice ahora el parámetro -v y con el parámetro -i:

```
curl -v www.httpbin.org
```

```
curl -i www.httpbin.org
```

¿Cuáles son las diferencias con los diferentes parámetros?

```
felipe@felipe-Latitude-5480:~$ curl www.httpbin.org
<!DOCTYPE html>
<html lang="en">

<head>
  <meta charset="UTF-8">
  <title>httpbin.org</title>
  <link href="https://fonts.googleapis.com/css?family=Open+Sans:400,700|Source+Code+Pro:300,600|Titillium+Web:400,600,700"
    rel="stylesheet">
  <link rel="stylesheet" type="text/css" href="/flasgger_static/swagger-ui.css">
</head>
<link rel="icon" type="image/png" href="/static/favicon.ico" sizes="64x64 32x32 16x16" />
<style>
  html {
    box-sizing: border-box;
    overflow: -moz-scrollbars-vertical;
    overflow-y: scroll;
  }

  *,
  *:before,
  *:after {
```

```
</html>felipe@felipe-Latitude-5480:~$ curl -v www.httpbin.org
* Trying 54.221.78.73:80...
* TCP_NODELAY set
* Connected to www.httpbin.org (54.221.78.73) port 80 (#0)
> GET / HTTP/1.1
> Host: www.httpbin.org
> User-Agent: curl/7.68.0
> Accept: */*
>
* Mark bundle as not supporting multiuse
< HTTP/1.1 200 OK
< Date: Fri, 04 Mar 2022 22:56:45 GMT
< Content-Type: text/html; charset=utf-8
< Content-Length: 9593
< Connection: keep-alive
< Server: gunicorn/19.9.0
< Access-Control-Allow-Origin: *
< Access-Control-Allow-Credentials: true
<
<!DOCTYPE html>
<html lang="en">

<head>
```

```
</html>felipe@felipe-Latitude-5480:~$ curl -i www.httpbin.org
HTTP/1.1 200 OK
Date: Fri, 04 Mar 2022 22:57:50 GMT
Content-Type: text/html; charset=utf-8
Content-Length: 9593
Connection: keep-alive
Server: gunicorn/19.9.0
Access-Control-Allow-Origin: *
Access-Control-Allow-Credentials: true

<!DOCTYPE html>
<html lang="en">

<head>
  <meta charset="UTF-8">
  <title>httpbin.org</title>
  <link href="https://fonts.googleapis.com/css?family=Open+Sans:400,700|Source
+Code+Pro:300,600|Titillium+Web:400,600,700"
    rel="stylesheet">
  <link rel="stylesheet" type="text/css" href="/flasgger_static/swagger-ui.css
">
  <link rel="icon" type="image/png" href="/static/favicon.ico" sizes="64x64 32
x32 16x16" />
```