

Romeo and Juliet

ACT I

PROLOGUE

*Two households, both alike in dignity,
In fair Verona, where we lay our scene,
From ancient grudge break to new mutiny,
Where civil blood makes civil hands unclean.
From forth the fatal loins of these two foes
A pair of star-cross'd lovers take their life;
Whose misadventured piteous overthrows
Do with their death bury their parents' strife.
The fearful passage of their death-mark'd love,
And the continuance of their parents' rage,
Which, but their children's end, nought could remove,
Is now the two hours' traffic of our stage;
The which if you with patient ears attend,
What here shall miss, our toil shall strive to mend.*

SCENE I. Verona. A public place.

Enter SAMPSON and GREGORY, of the house of Capulet, armed with swords and bucklers

SAMPSON

Gregory, o' my word, we'll not carry coals.

GREGORY

No, for then we should be colliers.

SAMPSON

I mean, an we be in choler, we'll draw.

GREGORY

Ay, while you live, draw your neck out o' the collar.

SAMPSON

I strike quickly, being moved.

GREGORY

But thou art not quickly moved to strike.

SAMPSON

A dog of the house of Montague moves me.

GREGORY

*To move is to stir; and to be valiant is to stand:
therefore, if thou art moved, thou runn'st away.*

Hmm a static page, nothing interesting in the source either, lets look around for more interesting files and directories

A robots.txt, with some weird base64 looking strings:

← → ↻ 52.229.134.185/robots.txt

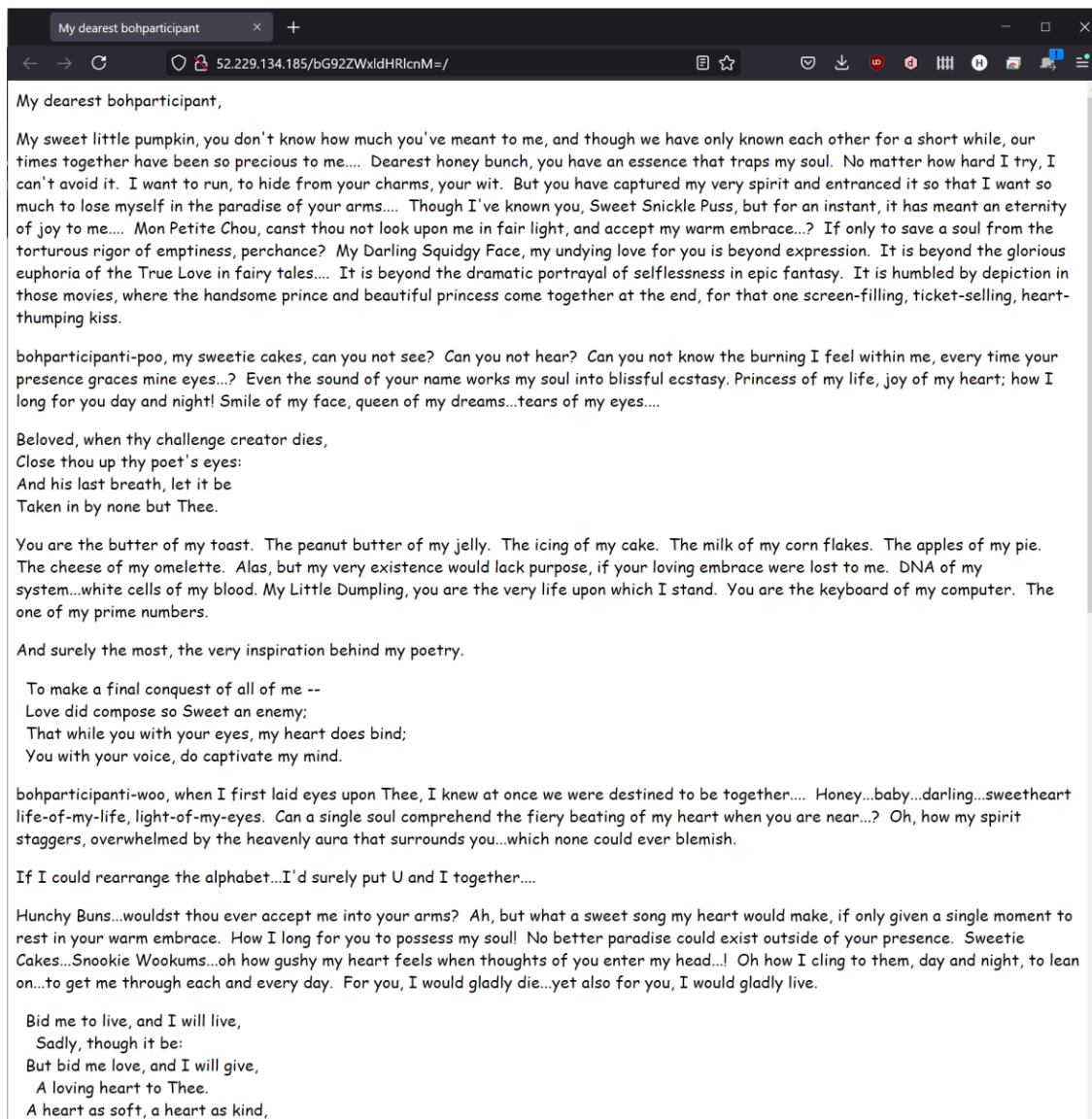
```
Disallow: /mapprint?
Disallow: /maps/api/js/
Allow: /maps/api/js
Disallow: /maps/api/place/js/
Disallow: /maps/api/staticmap
Disallow: /maps/api/streetview
Disallow: /maps/_/sw/manifest.json
Disallow: /mld?
Disallow: /cHVZaGNhcnQ=
Disallow: /staticmap?
Disallow: /maps/preview
Disallow: /maps/place
Disallow: /maps/timeline/
Disallow: /help/maps/streetview/partners/welcome/
Disallow: /help/maps/indoormaps/partners/
Disallow: /lochp?
Disallow: /center
Disallow: /ie?
Disallow: /blogsearch/
Disallow: /blogsearch_feeds
Disallow: /advanced_blog_search
Disallow: /uds/
Disallow: /dW5waWxvdGVk
Disallow: /chart?
Disallow: /transit?
Allow: /calendar$
Allow: /calendar/about/
Disallow: /calendar/
Disallow: /cl2/feeds/
Disallow: /cl2/ical/
Disallow: /coop/directory
Disallow: /coop/manage
Disallow: /trends?
Disallow: /ZWRnZQ==
Disallow: /trends/music?
Disallow: /trends/hottrends?
Disallow: /trends/viz?
Disallow: /trends/embed.js?
Disallow: /trends/fetchComponent?
Disallow: /trends/beta
Disallow: /trends/topics
Disallow: /musica
Disallow: /musicad
Disallow: /musicas
Disallow: /musicl
Disallow: /musics
Disallow: /musicsearch
Disallow: /musicsp
Disallow: /musiclp
Disallow: /urchin_test/
Disallow: /YmFrZXJ5
Disallow: /movies?
Disallow: /wapsearch?
Allow: /safebrowsing/diagnostic
Allow: /safebrowsing/report_badware/
Allow: /safebrowsing/report_error/
Allow: /safebrowsing/report_phish/
Disallow: /reviews/search?
Disallow: /orkut/albums
Disallow: /cbk
Disallow: /ZHJpZXI=
Disallow: /recharge/dashboard/car
Disallow: /recharge/dashboard/static/
Disallow: /profiles/me
Allow: /profiles
Disallow: /s2/profiles/me
Allow: /s2/profiles
Allow: /s2/oz
Allow: /s2/photos
Allow: /s2/search/social
Allow: /s2/static
Disallow: /s2
Disallow: /transconsole/portal/
Disallow: /gcc/
Disallow: /aclk
```

Hmm lets check these out:

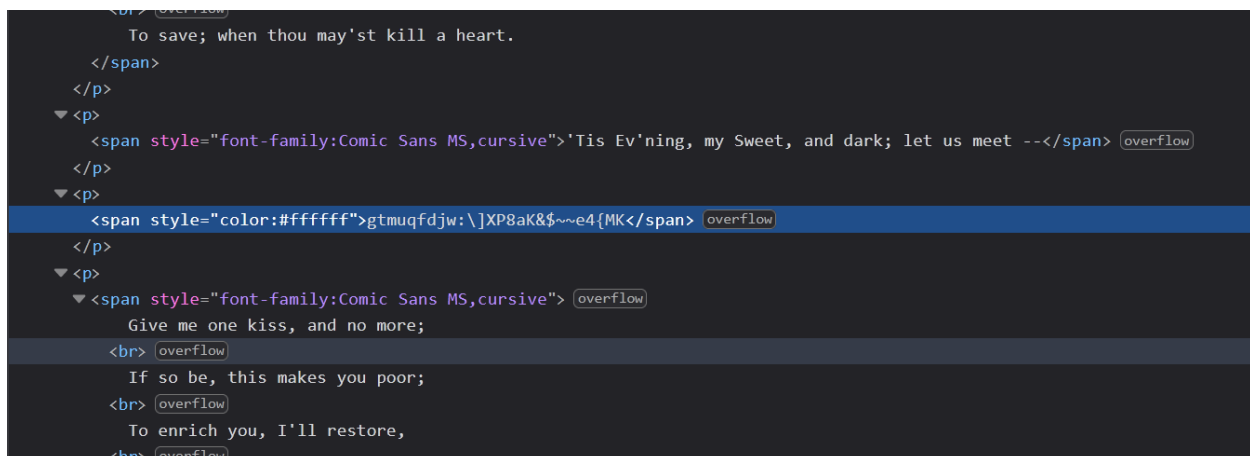
```
#!/bin/bash
while read -ru 4 LINE; do
    read -r REP <<(exec curl -IsS "$LINE" 2>&1)
    echo "$LINE: $REP"
done 4< "$1"
```

A quick script and url list parse later, a hit!:

```
http://52.229.134.185/cHVzaGNhcnQ=: HTTP/1.1 404 Not Found
http://52.229.134.185/ZWRnZQ==/: HTTP/1.1 404 Not Found
http://52.229.134.185/YmFrZXJ5/: HTTP/1.1 404 Not Found
http://52.229.134.185/ZHJpZXI=: HTTP/1.1 404 Not Found
http://52.229.134.185/c3RyYXRlZ3k=: HTTP/1.1 404 Not Found
http://52.229.134.185/cHJvbXB0bHk=: HTTP/1.1 404 Not Found
http://52.229.134.185/bG92ZWxldHRlcnm=: HTTP/1.1 200 OK
http://52.229.134.185/ZmxpcA==/: HTTP/1.1 404 Not Found
http://52.229.134.185/Ym9oMjE=: HTTP/1.1 404 Not Found
```



Inspecting the source we see a funny looking string:



Playing around with the string in cyber chef, it looks like the usual format for credentials:

Recipe

ROT13

☒ Rotate lower case chars

☒ Rotate upper case chars

☐ Rotate numbers

Amount: 21

Input

start: 26 length: 26
end: 26 lines: 1
length: 0

gtmuqfdjw:\]XP8aK&\$~e4{MK

Output

start: 26 time: 0ms
end: 26 length: 26
length: 0 lines: 1

bohplayer:\]SK8vF&\$~z4{HF

Which lets us ssh into the machine:

```
fish /mnt/c/Users/admin x bohplayer@boh21-ctf-web: ~ + v
* Documentation: https://help.ubuntu.com
* Management:   https://landscape.canonical.com
* Support:      https://ubuntu.com/advantage

System information as of Sat Nov 6 08:24:46 UTC 2021

System load: 0.0          Processes:            130
Usage of /:  6.2% of 28.90GB Users logged in:          1
Memory usage: 42%         IPv4 address for eth0: 10.0.0.4
Swap usage:  0%

* Super-optimized for small spaces - read how we shrank the memory
  footprint of MicroK8s to make it the smallest full K8s around.

https://ubuntu.com/blog/microk8s-memory-optimisation

18 updates can be applied immediately.
16 of these updates are standard security updates.
To see these additional updates run: apt list --upgradable

Last login: Sat Nov 6 07:54:15 2021 from 60.53.13.22
bohplayer@boh21-ctf-web:~$ |
```

The challenge mentioned something about receiving love letters every minute

After much searching we see that the http server logs are accessible with the user we got:

```
bohplayer@boh21-ctf-web:/var/log/apache$ cat other_vhosts_access.log
boh21-ctf-web.internal.cloudapp.net:80 127.0.0.1 - - [06/Nov/2021:00:01:01 +0000] "GET /Qk9IMjF7dDBfbXlfZDNhcmU1dH0= HTTP/1.1" 404 490 "-" "python-requests/2.22.0"
boh21-ctf-web.internal.cloudapp.net:80 127.0.0.1 - - [06/Nov/2021:00:02:02 +0000] "GET /Qk9IMjF7dDBfbXlfZDNhcmU1dH0= HTTP/1.1" 404 490 "-" "python-requests/2.22.0"
boh21-ctf-web.internal.cloudapp.net:80 127.0.0.1 - - [06/Nov/2021:00:03:01 +0000] "GET /Qk9IMjF7dDBfbXlfZDNhcmU1dH0= HTTP/1.1" 404 490 "-" "python-requests/2.22.0"
boh21-ctf-web.internal.cloudapp.net:80 127.0.0.1 - - [06/Nov/2021:00:04:01 +0000] "GET /Qk9IMjF7dDBfbXlfZDNhcmU1dH0= HTTP/1.1" 404 490 "-" "python-requests/2.22.0"
boh21-ctf-web.internal.cloudapp.net:80 127.0.0.1 - - [06/Nov/2021:00:05:01 +0000] "GET /Qk9IMjF7dDBfbXlfZDNhcmU1dH0= HTTP/1.1" 404 490 "-" "python-requests/2.22.0"
boh21-ctf-web.internal.cloudapp.net:80 127.0.0.1 - - [06/Nov/2021:00:06:01 +0000] "GET /Qk9IMjF7dDBfbXlfZDNhcmU1dH0= HTTP/1.1" 404 490 "-" "python-requests/2.22.0"
boh21-ctf-web.internal.cloudapp.net:80 127.0.0.1 - - [06/Nov/2021:00:07:02 +0000] "GET /Qk9IMjF7dDBfbXlfZDNhcmU1dH0= HTTP/1.1" 404 490 "-" "python-requests/2.22.0"
```

Decoding that base64 portion gives us the flag: BOH21{t0_my_d3are5t}