

## Linux assignment

1. curl -s <http://public-dns.info/nameserver/br.csv>

```
GCSDSKTOP-A2LJ9P4 MINGW64 ~/networking
$ curl -s http://public-dns.info/nameserver/br.csv
ip_address,name,as_number,as_org,country_code,city,version,error,dnssec,reliability,checked_at,created_at
177.184.131.180,,28368,SOBRALNET SERVICOS E TELECOMUNICACOES LTDA - ME,BR,Magalhaes de Almeida,,,false,0.75,2021-05-06T11:28:20Z,2020-09-02T08:54:42Z
186.194.224.82,186.194.224.82.cabonnet.com.br,,53143,R&R PROVEDOR DE INTERNET LTDA,BR,Presidente Prudente,,,false,0.75,2022-03-09T15:13:29Z,2020-09-02T08:54:55Z
177.104.127.114,ns1.tnetsofcoes.com.br,,263655,T-NET WIRELESS E INFORMA&#769 TICA,BR,Fortaleza,1.0.112,,false,0.99,2021-02-13T00:02:18Z,2020-09-28T21:25:31Z
201.44.177.131,,4230,CLARO S.A.,BR,,dnsmasq-2.47,,true,0.79,2021-05-03T22:25:56Z,2020-12-12T04:48:58Z
```

It show the content details of the link like ip address, name, as\_number and so on.

-s, --silent -> doesn't show progress meter, executes the curl command silent or quiet mode.

a, --append -> when used in upload, curl appends to the target file instead of overwriting it.

--basic -> tells curl to use HTTP authentication to connect with the remote host.

-K -> reads the curl arguments from a text file, as if they were provided on command line

-F --form -> lets curl send a POST data using the Content-Type multipart/form-data

-# -> makes curl to display the progress bar

2. curl -s <http://public-dns.info/nameserver/br.csv> | cut -d, -f1

```
$ curl -s http://public-dns.info/nameserver/br.csv | cut -d, -f1
ip_address
177.184.131.180
186.194.224.82
177.104.127.114
201.44.177.131
138.97.84.3
164.163.1.90
```

It show the first coloum or till first delimiter of the link file content.

3. `curl -s http://public-dns.info/nameserver/br.csv | cut -d, -f1 | shuf`

```
GCS@DESKTOP-A2LJ9P4 MINGW64 ~  
$ curl -s http://public-dns.info/nameserver/br.csv | cut -d, -f1 | shuf  
45.225.123.237  
45.225.123.205  
177.200.48.48  
187.111.160.29  
177.207.192.137  
179.109.15.42  
200.195.148.172
```

The shuf command writes a random permutation of the input lines to standard output.

4. `curl -s http://public-dns.info/nameserver/br.csv | cut -d, -f1 | shuf | tail -n 50`

```
GCS@DESKTOP-A2LJ9P4 MINGW64 ~  
$ curl -s http://public-dns.info/nameserver/br.csv | cut -d, -f1 | shuf | tail -n 50  
45.225.123.249  
177.104.125.173  
189.44.104.13  
177.124.184.52  
45.225.123.103  
189.51.116.5  
200.195.148.172  
18.228.199.122  
45.165.236.69  
45.225.123.236  
186.202.139.63
```

Tail -n 50 will print last 50 row.

-c : prints last n bytes

-q : it is used to print two file. Head of second file will be on tail of first file.

-v : in this the file name is file print then the work is proceed.

-f : used by administration to monitor.

5. `curl -s http://public-dns.info/nameserver/br.csv | cut -d, -f1 | tail -n 50 | xargs -i timeout 1 ping -c1 -w 1 {}`

```
$ curl -s http://public-dns.info/nameserver/br.csv | cut -d, -f1 | tail -n 50 | xargs -i timeout 1 ping -c1 -w 1 {}
Bad parameter 177.55.207.38.
Bad parameter 200.98.80.7.
Bad parameter 45.225.123.199.
Bad parameter 45.225.123.198.
Bad parameter 45.225.123.161.
Bad parameter 45.225.123.28.
Bad parameter 45.225.123.101.
Bad parameter 45.225.123.103.
Bad parameter 45.225.123.110.
Bad parameter 45.225.123.119.
Bad parameter 45.225.123.120.
```

Xargs take input and `-i` used to replace it with `{}`.

The **ping** command determining the status of the network and various foreign hosts, tracking and isolating hardware and software problems, and testing, measuring, and managing networks.

**-c** - Specifies the number of packets.

6. `$ curl -s http://public-dns.info/nameserver/br.csv | cut -d, -f1 | tail -n 50 | grep "225"`

```
$ curl -s http://public-dns.info/nameserver/br.csv | cut -d, -f1 | tail -n 50 | grep "225"
45.225.123.199
45.225.123.198
45.225.123.161
45.225.123.28
45.225.123.101
45.225.123.103
```

Grep command used to match the input string with given data and print the output. In above example the output will be that which have “225” string

7. `curl -s http://public-dns.info/nameserver/br.csv | awk '{print substr($7, 6, length($7)) " " substr($4, 1, length($4) - 1)}'`

```
$ curl -s http://public-dns.info/nameserver/br.csv | awk '{print substr($7, 6, length($7)) " " substr($4, 1, length($4) - 1)}'  
,Magalhaes TELECOMUNICACOE  
INTERNE  
INFORMA&#76  
  
telecomunicacoe
```

awk command is manipulating the data and generate report.

And print 7<sup>th</sup> column 6<sup>th</sup> letter till 7<sup>th</sup> column length and add space and print 4<sup>th</sup> column from 1<sup>th</sup> line to till 4<sup>th</sup> column length -1.

8. `$ curl -s http://public-dns.info/nameserver/br.csv | cut -d, -f1 | sort -n`

```
$ curl -s http://public-dns.info/nameserver/br.csv | cut -d, -f1 | sort -n  
ip_address  
18.228.121.109  
18.228.199.122  
18.229.117.217  
35.198.23.47  
35.247.214.247
```

sort command used to sort the input alphanumarically.

9. `$ curl -s http://public-dns.info/nameserver/br.csv | cut -d, -f1 | head -n 10`

```
$ curl -s http://public-dns.info/nameserver/br.csv | cut -d, -f1 | head -n 10  
ip_address  
177.184.131.180  
186.194.224.82  
177.104.127.114  
201.44.177.131  
138.97.84.3  
164.163.1.90
```

head -n 10 will print first 10 row.

10. `curl -s http://public-dns.info/nameserver/br.csv | awk '{print $2 " " $1 "ms" }'`

```
$ curl -s http://public-dns.info/nameserver/br.csv | awk '{print $2 " " $1 "ms" }'  
ip_address,name,as_number,as_org,country_code,city,version,error,dnssec,reliability,checked_at,created_atms  
SERVICOS 177.184.131.180,,28368,SOBRALNETms  
PROVEDOR 186.194.224.82,186.194.224.82.cabonnet.com.br.,53143,R&Rms  
WIRELESS 177.104.127.114,ns1.tnetsolucoes.com.br.,263655,T-NETms  
S.A.,BR,,dnsmasq-2.47,,true,0.79,2021-05-03T22:25:56Z,2020-12-12T04:48:58Z 201.44.177.131,,4230,CLAROms  
COMUNICACOES 138.97.84.3,ns2.interles.net.br.,264138,INTERLESmms  
servicos 164.163.1.90,mx.bhotelbrasil.com.br.,265933,connectxms
```

The output will be first come 1 single space data till 2<sup>nd</sup> space and then print 1<sup>st</sup> coloumn till space and add ms