Nama: Tri Hesti Wahyuningsih

ID SIB: 3261839

IP Address Log Filtering

1. Download terlebih dahulu file log dengan perintah wget

```
wget https://dapur.bisaai.id/auth.log
```

2. Setelah itu kita gunakan fungsi cat

```
cat auth.log
```

Dibawah merupakan isi dari file log

```
sep 26 16:13:07 expbig sshd[14803]: pam_unix(sshd:auth): authentication failure; logname= uid=0 euid=0 tty=ssh ruser= rhost=157.230.103.238 sep 26 16:13:09 expbig sshd[14803]: Failed password for invalid user wang from 157.230.103.238 port 35560 ssh2 sep 26 16:13:09 expbig sshd[14803]: Received disconnect from 157.230.103.238 port 35560:11: Normal Shutdown, Thank you for playing [preauth] sep 26 16:13:09 expbig sshd[14803]: Disconnected from invalid user wang 157.230.103.238 port 35560 [preauth] sep 26 16:13:09 expbig sshd[14805]: pam_unix(sshd:auth): check pass; user unknown sep 26 16:13:09 expbig sshd[14805]: pam_unix(sshd:auth): authentication failure; logname= uid=0 euid=0 tty=ssh ruser= rhost=157.230.103.238 sep 26 16:13:10 expbig sshd[14807]: pam_unix(sshd:auth): authentication failure; logname= uid=0 euid=0 tty=ssh ruser= rhost=157.230.103.238 sep 26 16:13:10 expbig sshd[14807]: pam_unix(sshd:auth): authentication failure; logname= uid=0 euid=0 tty=ssh ruser= rhost=157.230.103.238 sep 26 16:13:10 expbig sshd[14807]: pam_unix(sshd:auth): authentication failure; logname= uid=0 euid=0 tty=ssh ruser= rhost=157.230.103.238 sep 26 16:13:11 expbig sshd[14807]: pam_unix(sshd:auth): authentication failure; logname= uid=0 euid=0 tty=ssh ruser= rhost=157.230.103.238 sep 26 16:13:11 expbig sshd[14807]: Failed password for invalid user dev from 157.230.103.238 port 39682 shg; sep 26 16:13:11 expbig sshd[14807]: Failed password for invalid user dev from 157.230.103.238 port 40166 ssh2 sep 26 16:13:11 expbig sshd[14805]: Received disconnect from 157.230.103.238 port 39682:11: Normal Shutdown, Thank you for playing [preauth] sep 26 16:13:12 expbig sshd[14807]: Received disconnect from 157.230.103.238 port 40166:11: Normal Shutdown, Thank you for playing [preauth] sep 26 16:13:12 expbig sshd[14807]: Received disconnect from 157.230.103.238 port 40166:11: Normal Shutdown, Thank you for playing [preauth] sep 26 16:13:13 expbig sshd[14809]: Pam_unix(sshd:auth): check pass; user unknown sep 26 16:13:13 expbig sshd[14806]: pa
```

3. Kita filter log yang disconnect menggunakan fungsi grep berikut

```
cat auth.log | grep "Disconnected"
```

Sehingga yang ditampilkan hanya log histori disconnected

```
ep 27 05:38:56 expbig sshd[8819]
                                                                from invalid user doc 157.230.103.238 port 36140 [preauth]
                                                                from invalid user guest 157.230.103.238 port 46312 [preauth] from invalid user original 157.230.103.238 port 50188 [preauth]
Sep 27 05:39:08 expbig sshd[8955]:
Sep 27 05:39:08 expbig sshd[8957]
Sep 27 05:39:21 expbig sshd[9017]
                                                                from invalid user guest 157.230.103.238 port 37260 [preauth]
                                                               from invalid user project 157.230.103.238 port 42052 [preauth]
Sep 27 05:39:22 expbig sshd[9020]:
                                                              d from invalid user backup 157.230.103.238 port 46680 [preauth]
d from invalid user original 157.230.103.238 port 59212 [preauth]
Sep 27 05:39:23 expbig sshd[9022]:
    27 05:39:26 expbig sshd[9051]:
                                                                from invalid user root 157.230.103.238 port 56266 [preauth]
    27 05:39:34 expbig sshd[9053]:
                                                                from invalid user pub 157.230.103.238 port 37986 [preauth] from invalid user the 157.230.103.238 port 39342 [preauth]
    27 05:39:36 expbig sshd[9077
    27 05:39:36 expbig sshd[9081]
    27 05:39:37 expbig sshd[9083]
                                                                from invalid user informix 157.230.103.238 port 40096 [preauth]
                                                                from invalid user patrol 157.230.103.238 port 33582 [preauth] from invalid user backup 157.230.103.238 port 47066 [preauth] from invalid user duc 157.230.103.238 port 51714 [preauth]
    27 05:39:43 expbig sshd[9119]:
    27 05:39:46 expbig sshd[9141]
27 05:39:47 expbig sshd[9147]
```

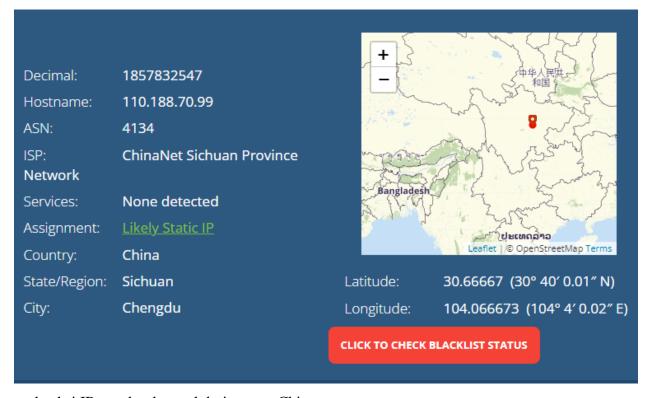
4. Setelah itu kita filter IP saja dan menghilangkan teks lainnya dengan fungsi di bawah ini

```
cat auth.log | grep "Disconnected" | cut -d " " -f 12 | sort | uniq
```

Menggunakan fungsi sort dan uniq agar tidak terjadi duplikat IP yang sama.

```
103.121.117.181
103.145.107.232
103.145.154.250
103.145.155.250
103.48.116.47
103.73.73.66
103.85.234.21
103.94.129.17
103.96.151.129
104.131.93.33
104.236.0.161
104.236.246.16
104.236.33.82
104.238.116.19
104.248.144.147
104.248.181.156
106.14.61.79
107.170.172.23
107.170.212.116
108.5.182.59
108.58.17.122
109.132.156.112
109.167.210.163
```

5. Track salah satu IP menggunakan situs https://whatismyipaddress.com/



terdeteksi IP tersebut berasal dari negara China