

Server Analysis Report

확인할 주요 포트

21	FTP
22	SSH
80	HTTP
443	HTTPS
3389	윈도우 원격 데스크톱
8080	HTTP

DB 관련 포트

1443	MS-SQL
1521	Oracle
3306	MySQL
5432	PostgreSQL

실행코드

```
import socket

ip_input = input('IP를 입력하세요: ')
ports = [21, 22, 80, 443, 3389, 8080, 1433, 1521, 3306, 5432]
open_ports = []
banners = []

for port in ports:
    try:
        s = socket.socket()
        print("Attempting to connect to " + ip_input + " : " + str(port))
        s.connect((ip_input, port))
        banner = s.recv(1024)
        if banner:
            print("Port " + str(port) + " Open : " + str(banner))
        elif banner == b'':
            print("Port " + str(port) + " Open")
        open_ports.append(port)
        banners.append(banner)
        s.close()
    except: pass

print('\n<result>')

for n in range(len(open_ports)):
    print("Port " + str(open_ports[n]) + " : ", end='')
    try:
        str_text = banners[n].decode('utf-8')
        print(str_text)
    except: pass
```

코드를 실행하면 IP 를 입력할 수 있다. IP 를 입력하면 주요 포트에 접속을 시도한다. 응답이 있는 포트는 응답받은 배너를 표시하지만 웹서버와 같이 응답을 주지 않는 포트의 경우 배너가 표시되지 않는다.

- 서버 1(43.201.22.47) 결과

```

IP를 입력하세요: 43.201.22.47
Attempting to connect to 43.201.22.47 : 21
Attempting to connect to 43.201.22.47 : 22
Port 22 Open : b'SSH-2.0-OpenSSH_8.9p1 Ubuntu-3\r\n'
Port 80 Open
Port 80 Open
Attempting to connect to 43.201.22.47 : 443
Attempting to connect to 43.201.22.47 : 3389
Attempting to connect to 43.201.22.47 : 8080
Attempting to connect to 43.201.22.47 : 1433
Attempting to connect to 43.201.22.47 : 1521
Attempting to connect to 43.201.22.47 : 3306
Port 3306 Open : b'[\x00\x00\x00\n8.0.31-0ubuntu0.22.04.1\x00\x93\x02\x00\x00\x14mq^x?\x08\x10\x00\xff\xff\xff\x02\x00\xff\xdf\x15\x00\x00\x00\x00\x00\x00\x00\x00\x00AS\x13;\x1a\x12dd\x1e\x1f)6\x00caching_sha2_password\x00'
Attempting to connect to 43.201.22.47 : 5432

<result>
Port 22 : SSH-2.0-OpenSSH_8.9p1 Ubuntu-3
Port 80 :
Port 3306 :

```

22번 포트: SSH Ubuntu

80번 포트: HTTP 웹서버

3306번 포트: MySQL

서버 1은 우분투, SSH, 웹서버와 MySQL을 이용하고 있음을 알 수 있다.

- 서버 2(15.164.164.59) 결과

```

IP를 입력하세요: 15.164.164.59
Attempting to connect to 15.164.164.59 : 21
Port 21 Open : b'220 (vsFTPd 3.0.3)\r\n'
Attempting to connect to 15.164.164.59 : 22
Port 22 Open : b'SSH-2.0-OpenSSH_8.0\r\n'
Attempting to connect to 15.164.164.59 : 80
Port 80 Open
Attempting to connect to 15.164.164.59 : 443
Attempting to connect to 15.164.164.59 : 3389
Attempting to connect to 15.164.164.59 : 8080
Attempting to connect to 15.164.164.59 : 1433
Attempting to connect to 15.164.164.59 : 1521
Attempting to connect to 15.164.164.59 : 3306
Attempting to connect to 15.164.164.59 : 5432

<result>
Port 21 : 220 (vsFTPd 3.0.3)
Port 22 : SSH-2.0-OpenSSH_8.0
Port 80 :

```

21번 포트: vsFTPd

22번 포트: SSH

80번 포트: HTTP 웹서버

서버 2는 vsFTPd를 이용하고 있으므로 리눅스일 것이며, FTP, SSH, 웹서버를 이용하고 있음을 알 수 있다.

- 서버 3(13.125.109.155)

```
IP를 입력하세요: 13.125.109.155
Attempting to connect to 13.125.109.155 : 22
Attempting to connect to 13.125.109.155 : 22
Attempting to connect to 13.125.109.155 : 80
Attempting to connect to 13.125.109.155 : 443
Attempting to connect to 13.125.109.155 : 3389
Port 3389 Open
Attempting to connect to 13.125.109.155 : 8080
Attempting to connect to 13.125.109.155 : 1433
Attempting to connect to 13.125.109.155 : 1521
Attempting to connect to 13.125.109.155 : 3306
Port 3306 Open : b'J\x00\x00\x00\n8.0.31\x00\xc4\x01\x00\x00\x13\x19B:I!`8\x00\xff\xff\xff\x02\x00\xff\xdf\x15\x00\x00\x00\x00\x00\x00\x00\x00\x0b\x03D?\x17CjBM\x03=Z\x00caching_sha2_password\x00'
Attempting to connect to 13.125.109.155 : 5432

<result>
Port 3389 :
Port 3306 :
```

3389번 포트: 윈도우 원격 데스크톱

3306번 포트: MySQL

서버 3은 윈도우 원격 데스크톱을 이용하고 있으므로 윈도우 서버일 것이며, MySQL을 이용하고 있음을 알 수 있다.