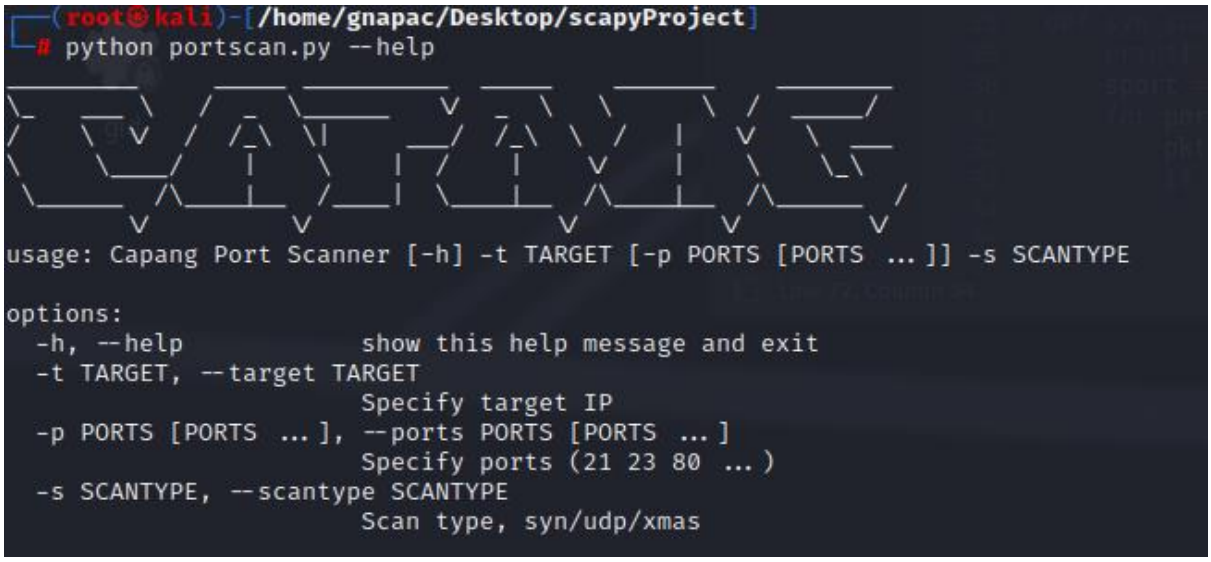
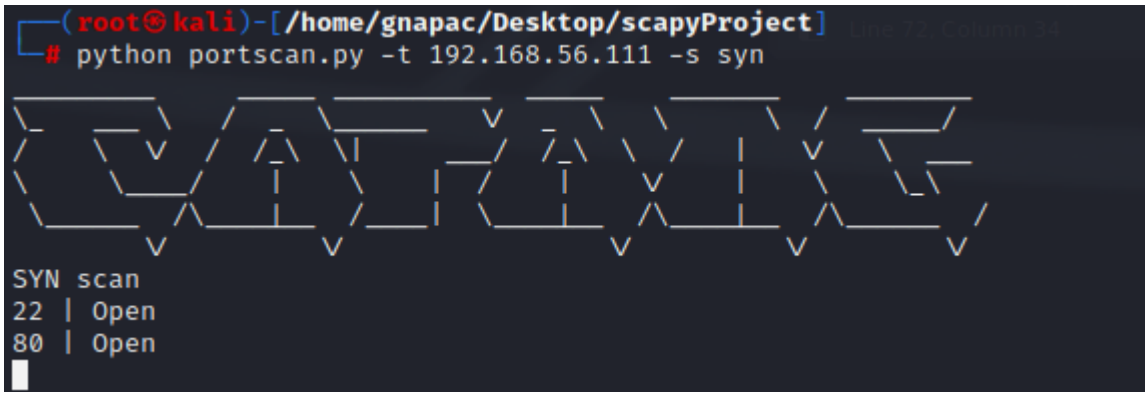
Port Scanner

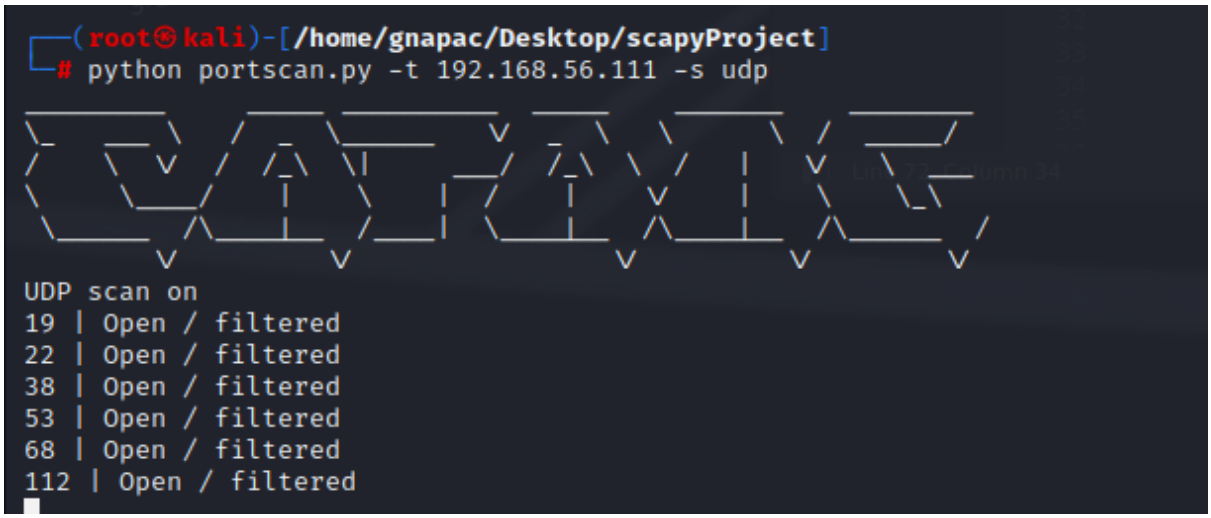


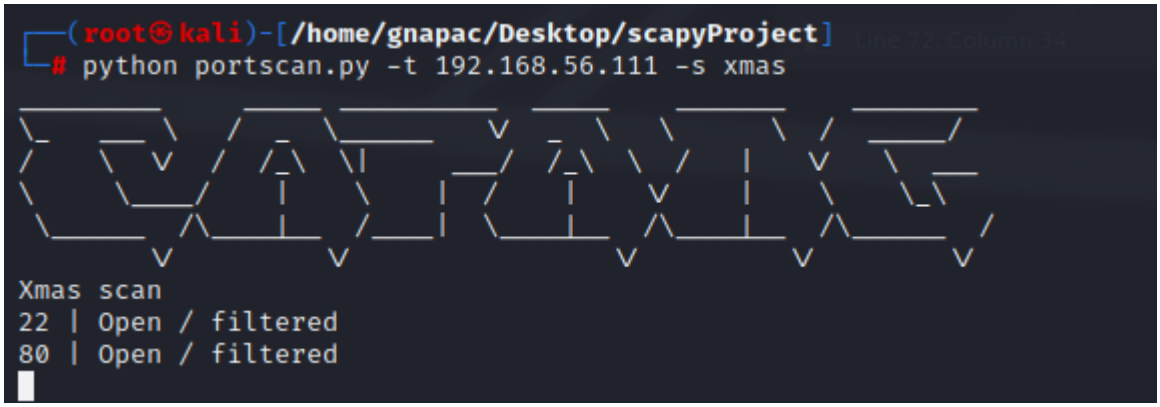
3 different type of scan

- SYN
- UDP
- XMAS

Can specify target ports if not specified, will scan top 1000 tcp/udp ports







Source Code

```
#!/usr/bin/env python

# port scanner
import argparse
from signal import signal, SIGINT
from scapy.all import *

def handler(signal_received, frame):
    # Handle any cleanup here
    print('\n.....Exiting gracefully')
    front()
    exit(0)

def front():
    # Molek sikit
    print('_____  _____ _____ _____  _____ ')
    print('\\_  ___ \\  / _ \\_____  \\/ _ \\  \\  \\ / _____/')
    print('/   \\ \\/ / /_\\ \\|    ___/ /_\\ \\ \\ /  |  \\/  \\ ___ ')
    print('\\    \\____/   |   \\   | /   |   \\/   |   \\   \\_\\ ')
    print(' \\_____ /\\____|__ /____| \\____|__ /\\____|__ /\\_____ /')
    print('       \\/       \\/           \\/       \\/      \\/ ')
```

```
# output format # TODO make prettier
def print_ports(port, state):
    print("%s | %s" % (port, state))


# syn scan
def syn_scan(target, ports):
    print("SYN scan")
    sport = RandShort()
    for port in ports:
        pkt = sr1(IP(dst=target)/TCP(sport=sport, dport=port, flags="S"), timeout=1, verbose=0)
        if pkt != None:
            if pkt.haslayer(TCP):
                if pkt[TCP].flags == 20:
                    pass
                elif pkt[TCP].flags == 18:
                    print_ports(port, "Open")
                else:
                    print_ports(port, "TCP packet resp / filtered")
            elif pkt.haslayer(ICMP):
                print_ports(port, "ICMP resp / filtered")
            else:
                print_ports(port, "Unknown resp")
                print(pkt.summary())
        else:
            print_ports(port, "Unanswered")


# udp scan
def udp_scan(target, ports):
    print("UDP scan on")
    for port in ports:
```

```
        pkt = sr1(IP(dst=target)/UDP(sport=port, dport=port), timeout=2, verbose=0)
        if pkt == None:
            print_ports(port, "Open / filtered")
        else:
            if pkt.haslayer(ICMP):
                pass
            elif pkt.haslayer(UDP):
                print_ports(port, "Open / filtered")
            else:
                print_ports(port, "Unknown")
                print(pkt.summary())

# xmas scan
def xmas_scan(target, ports):
    print("Xmas scan")
    sport = RandShort()
    for port in ports:
        pkt = sr1(IP(dst=target)/TCP(sport=sport, dport=port, flags="FPU"), timeout=1, verbose=0)
        if pkt != None:
            if pkt.haslayer(TCP):
                if pkt[TCP].flags == 20:
                    pass
                else:
                    print_ports(port, "TCP flag %s" % pkt[TCP].flag)
            elif pkt.haslayer(ICMP):
                print_ports(port, "ICMP resp / filtered")
            else:
                print_ports(port, "Unknown resp")
                print(pkt.summary())
        else:
            print_ports(port, "Open / filtered")
```

```
if __name__ == '__main__':
    front()
    signal(SIGINT, handler)
    # argument setup
    parser = argparse.ArgumentParser("Capang Port Scanner")
    parser.add_argument("-t", "--target", help="Specify target IP", required=True)
    parser.add_argument("-p", "--ports", type=int, nargs="+", help="Specify ports (21 23 80 ...)")
    parser.add_argument("-s", "--scantype", help="Scan type, syn/udp/xmas", required=True)
    args = parser.parse_args()

    # arg parsing
    target = args.target
    scantype = args.scantype.lower()
    # set ports if passed

    if args.ports:
        ports = args.ports
    else:
        # default port range
        if scantype == "syn" or scantype == "xmas" or scantype == "s" or scantype == "x":
            ports =
[1,3,4,6,7,9,13,17,19,20,21,22,23,24,25,26,30,32,33,37,42,43,49,53,70,79,80,81,82,83,84,85,88,89,9
0,99,100,106,109,110,111,113,119,125,135,139,143,144,146,161,163,179,199,211,212,222,254,255,
256,259,264,280,301,306,311,340,366,389,406,407,416,417,425,427,443,444,445,458,464,465,481,
497,500,512,513,514,515,524,541,543,544,545,548,554,555,563,587,593,616,617,625,631,636,646,
648,666,667,668,683,687,691,700,705,711,714,720,722,726,749,765,777,783,787,800,801,808,843,
873,880,888,898,900,901,902,903,911,912,981,987,990,992,993,995,999,1000,1001,1002,1007,100
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9,1720,1721,1723,1755,1761,1782,1783,1801,1805,1812,1839,1840,1862,1863,1864,1875,1900,191
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7,3828,3851,3869,3871,3878,3880,3889,3905,3914,3918,3920,3945,3971,3986,3995,3998,4000,400
1,4002,4003,4004,4005,4006,4045,4111,4125,4126,4129,4224,4242,4279,4321,4343,4443,4444,444
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1,8042,8045,8080,8081,8082,8083,8084,8085,8086,8087,8088,8089,8090,8093,8099,8100,8180,818
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12000,12174,12265,12345,13456,13722,13782,13783,14000,14238,14441,14442,15000,15002,1500
3,15004,15660,15742,16000,16001,16012,16016,16018,16080,16113,16992,16993,17877,17988,18
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elif scantype == "udp" or scantype == "u":

ports =
[2,3,7,9,13,17,19,20,21,22,23,37,38,42,49,53,67,68,69,80,88,111,112,113,120,123,135,136,137,138,
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045,4444,4500,4666,4672,5000,5001,5002,5003,5010,5050,5060,5093,5351,5353,5355,5500,5555,5
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20164,20206,20217,20249,20262,20279,20288,20309,20313,20326,20359,20360,20366,20380,2038
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20876,20884,20919,21000,21016,21060,21083,21104,21111,21131,21167,21186,21206,21207,2121
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```
    # scan types
    if scantype == "syn" or scantype == "s":
        syn_scan(target, ports)
    elif scantype == "udp" or scantype == "u":
        udp_scan(target, ports)
    elif scantype == "xmas" or scantype == "x":
        xmas_scan(target, ports)
    else:
        print("Scan type not supported")
```