**Part 1**

**Part 2**

sudo zmap -p 80 -b blacklist.txt -t 7200 -o zmap\_results.csv

**Question 4:**

204.56.191.53 – Texas A&M University  
Address space: 128.194.0.0 - 128.194.255.255 = 128.194.0.0/16

Port 22: 4 Addresses

128.194.13.135

128.194.19.117

128.194.146.103

128.194.177.7

Port 25: 0 Addresses

Port 53: 2 Addresses

128.194.211.238

128.194.254.1

Port 80: 32 Addresses  
128.194.14.17

128.194.16.31

128.194.16.176

128.194.17.241

128.194.18.113

128.194.18.115

128.194.18.176

128.194.37.121

128.194.37.122

128.194.38.203

128.194.43.93

128.194.56.161

128.194.68.8

128.194.68.134

128.194.92.10

128.194.92.182

128.194.96.54

128.194.147.30

128.194.147.44

128.194.162.211

128.194.164.31

128.194.164.37

128.194.164.59

128.194.164.135

128.194.164.165

128.194.164.185

128.194.164.228

128.194.164.244

128.194.167.75

128.194.168.16

128.194.210.23

128.194.243.152

Port 443: 42 Addresses

128.194.0.135

128.194.4.56

128.194.4.58

128.194.14.43

128.194.14.51

128.194.14.54

128.194.16.6

128.194.16.57

128.194.16.61

128.194.19.15

128.194.19.54

128.194.19.82

128.194.19.109

128.194.19.170

128.194.34.42

128.194.34.43

128.194.34.46

128.194.36.230

128.194.42.175

128.194.43.93

128.194.54.12

128.194.54.64

128.194.56.134

128.194.59.245

128.194.92.145

128.194.92.146

128.194.144.216

128.194.146.17

128.194.146.219

128.194.147.20

128.194.162.21

128.194.162.30

128.194.162.32

128.194.164.31

128.194.164.55

128.194.164.186

128.194.177.117

128.194.183.107

128.194.210.23

128.194.210.159

128.194.243.237

128.194.245.27

Port 636: 1 Address  
128.194.43.42  
  
Port 990: 3 Addresses

128.194.92.14

128.194.92.154

128.194.164.64  
  
Port 993: 2 Addresses

128.194.17.74

128.194.19.171

These 3 addresses are open on both port 80 and 443:

128.194.43.93

128.194.164.31

128.194.210.23

On TAMU’s network, I was able to find ports used for SSH, DNS, HTTP, HTTPS, LDAP, FTPS, IMAPS.

Using HTTP queries, it appears that the first 8 bits of the subdomain are assigned based on department or service.

128.194.14.X: Authentication Services

128.194.16.X: Chemistry Department

128.194.19.X: Atmospheric Sciences Department

128.194.37.X: Orca

**Part 3**