### Scapy 2

Note: The videos found [here](#) could help if you are stuck.

**TCP Handshake**

Write and execute the code that will perform a three-way TCP handshake to `packtpub.samsclass.info` with a destination port of `40001`. Here is some code to get you started (it generates the 3 way handshake):

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

from scapy.all import *

conf.L3socket
conf.L3socket=L3RawSocket

i=IP()
i.dst = "cit.dixie.edu"

t = TCP()
t.dport = 80
r = sr1(i/t)
t.flags = "A"
t.seq = r.ack
t.ack = r.seq + 1
p = i/t
reply = sr(p)
```

You will probably have to disable RST packets by doing something like:

```
sudo iptables -A OUTPUT
sudo iptables -A OUTPUT -p tcp -s 144.38.199.108 --tcp-flags RST RST -j DROP
```

Send an 8 character code as raw data. (Probably not your last name). You should be able to see if you succeeded by visiting this site. No more than 8 characters.

**Firewalking**

Modify your previous code so to send to destination port of `40002` on the previous server. Your packet should arrive with a TTL of 1 to the destination. HINT: This is very easy and should only necessitate adding a single line of code to the previous one. You will probably also make use of the traceroute program. You should be able to see if you succeeded by visiting this site. Write a short paragraph on what TCP firewalking is.

**To Submit**

- Tell me what code you submitted to the website. Also upload your code.