Command Line:

* traceroute: shows all route between current location of network to destination location
* whois: discover more information about the registered owner of an IP

lab machine: wch132-20.cs.ucr.edu

mininet login : mininet

19941221

addr: 10.0.2.15

ssh -X -p 2222 mininet@localhost

-X means forwarding, means I can run application with GUI over this ssh

timestap between first and last packet

* 13.7435 - 4.5725 = 9

since the mininet can not show wireshark properly, we use a software call x2Go to ssh to bolt and ssh to our pc and ssh to mininet

the second wget（no keep alive) request more packet because it require estalish everytime when you ask for request (not persistent)

**Connect to mininet from outside network(home)**

1. ssh to [ktsai017@bolt.cs.ucr.edu](mailto:ktsai017@bolt.cs.ucr.edu)
2. ssh to [ktsai017@wch132-20.cs.ucr.edu](mailto:ktsai017@wch132-20.cs.ucr.edu)
3. open virtualbox
4. open x2go connect to bolt
5. connect to [ktsai017@wch132-20.cs.ucr.edu](mailto:ktsai017@wch132-20.cs.ucr.edu)
6. ssh -X -p 2222 mininet@localhost

**create two terminal using tmux**

1. **ctrl + b**
2. **%**

**switch between terminals**

1. **ctrl + b**
2. **<-**
3. **->**

