

Dan Bonnett
CMPSCI 381 Lab 1
Due February 4, 8:00 a.m.

Honor Code: *This work is mine unless otherwise cited*

Questions to be answered:

6(a). TCP Connection for SSH session:

Packet numbers 1, 2, and 3:

1 0.000000000 141.195.226.137 53600 141.195.226.130 ssh TCP 74 53600
> ssh [SYN] Seq=0 Win=29200 Len=0 MSS=1460 SACK_PERM=1 TSval=195941508 TSecr=0
WS=128

2 0.000226000 141.195.226.130 ssh 141.195.226.137 53600 TCP 74 ssh >
53600 [SYN, ACK] Seq=0 Ack=1 Win=28960 Len=0 MSS=1460 SACK_PERM=1 TSval=37875955
TSecr=195941508 WS=128

3 0.000272000 141.195.226.137 53600 141.195.226.130 ssh TCP 66 53600
> ssh [ACK] Seq=1 Ack=1 Win=29312 Len=0 TSval=195941508 TSecr=37875955

6(b). TCP closing for SSH session:

Packet numbers 388, 389, 390, and 391

388 281.183555000 141.195.226.137 53600 141.195.226.130 ssh TCP 66
53600 > ssh [FIN, ACK] Seq=7144 Ack=7032 Win=41216 Len=0 TSval=196011804
TSecr=37946251

389 281.183668000 141.195.226.130 ssh 141.195.226.137 53600 TCP 66
ssh > 53600 [ACK] Seq=7032 Ack=7144 Win=41600 Len=0 TSval=37946251
TSecr=196011804

390 281.190485000 141.195.226.130 ssh 141.195.226.137 53600 TCP 66
ssh > 53600 [FIN, ACK] Seq=7032 Ack=7145 Win=41600 Len=0 TSval=37946253
TSecr=196011804

391 281.190519000 141.195.226.137 53600 141.195.226.130 ssh TCP 66
53600 > ssh [ACK] Seq=7145 Ack=7033 Win=41216 Len=0 TSval=196011806
TSecr=37946253

6(c). nc commands for TCP connection:

Packet numbers 149, 150, and 151:

```
149  140.522877000      141.195.226.130      44708 141.195.226.137      italk  TCP   74
      44708 > italk [SYN] Seq=0 Win=29200 Len=0 MSS=1460 SACK_PERM=1 TSval=37911086
      TSecr=0 WS=128

150  140.522923000      141.195.226.137      italk  141.195.226.130      44708 TCP   74
      italk > 44708 [SYN, ACK] Seq=0 Ack=1 Win=28960 Len=0 MSS=1460 SACK_PERM=1
      TSval=195976639 TSecr=37911086 WS=128

151  140.523085000      141.195.226.130      44708 141.195.226.137      italk  TCP   66
      44708 > italk [ACK] Seq=1 Ack=1 Win=29312 Len=0 TSval=37911086 TSecr=195976639
```

6(d). Closing the nc connection:

Packet numbers 352, 353, and 354:

```
352  268.276035000      141.195.226.137      italk  141.195.226.130      44708 TCP   66
      italk > 44708 [FIN, ACK] Seq=44 Ack=45 Win=29056 Len=0 TSval=196008577
      TSecr=37937456

353  268.276318000      141.195.226.130      44708 141.195.226.137      italk  TCP   66
      44708 > italk [FIN, ACK] Seq=45 Ack=45 Win=29312 Len=0 TSval=37943024
      TSecr=196008577

354  268.276356000      141.195.226.137      italk  141.195.226.130      44708 TCP   66
      italk > 44708 [ACK] Seq=45 Ack=46 Win=29056 Len=0 TSval=196008577 TSecr=37943024
```

6(e). Unencrypted data:

Packet numbers 348 and 274

```
348  246.004148000      141.195.226.137      italk  141.195.226.130      44708 TCP   83
      italk > 44708 [PSH, ACK] Seq=27 Ack=45 Win=29056 Len=17 TSval=196003009
      TSecr=37932808
```

```
rrW`EE@@@09Y\l(
Bthats phenomenal
```

```
274  209.108484000      141.195.226.137      italk  141.195.226.130      44708 TCP   92
      italk > 44708 [PSH, ACK] Seq=1 Ack=29 Win=29056 Len=26 TSval=195993785
      TSecr=37921349
```

```
rrW`EN@@@09YBzF
BEnothing man how about you
```

