

# CheckPoints

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## 一、checkpoint1

test1

```
xuanzitao@xuanzitao-G3-3579: ~/work/ComputerNetwork/Starter Code/...  
peer 1: 127.0.0.1:1111  
Spiffy local stuff: 00000000:2222  
Spiffy setup complete. 127.0.0.1:15441  
Delete this line after testing.  
Listening on 15441...  
  
=====SEND WHOHAS=====  
  
02000000edb65828cdf65bdb2d6f9d269cf499065bb716a09197162eb7b1f2c0407133bea05372b  
1111  
  
NOP!!!  
verifying packet sanity  
##### Test 1 Passed! #####  
15-441 PROJECT 2 PEER  
  
chunk-file: C.chunks  
has-chunk-file: A.chunks  
max-conn: 4  
peer-identity: 2  
peer-list-file: nodes.map  
peer 2: 127.0.0.1:2222  
peer 1: 127.0.0.1:1111
```

test2

```
xuanzitao@xuanzitao-G3-3579: ~/work/ComputerNetwork/Starter Code/...  
SEND ACK: 0  
SEND SEQ: 0  
DATA NUMBER SENT: 2016  
NOP!!!  
verifying packet sanity  
##### Test 2 Passed! #####  
15-441 PROJECT 2 PEER  
  
chunk-file: C.chunks  
has-chunk-file: A.chunks  
max-conn: 4  
peer-identity: 2  
peer-list-file: nodes.map  
peer 2: 127.0.0.1:2222  
peer 1: 127.0.0.1:1111  
Spiffy local stuff: 00000000:2222
```

## test3

```
xuanzitao@xuanzitao-G3-3579: ~/work/ComputerNetwork/Starter Code/...
Delete this line after testing.
creating Control packet of type 0 with 2 chunks
MAGIC: 15441
VERSION: 1
PACKET TYPE: 0
HEADER LENGTH: 16
TOTAL PACKET LENGTH: 60
=====1111=====NUMBER OF CHUNK HASH: 2
ALL DATA: 98fc8254f65cd82c464bcf3e040b87215b0909f91a6e1628e4a8384c55ec99d9955bd3
095ee8a322

=====SEND IHAVE=====

0edb65828cdf65bdb2d6f9d269cf499065bb716a
09197162eb7b1f2c0407133bea05372b2ce459de
NOP!!!
Good, went ten seconds without receiving IHAVE
##### Test 3 Passed! #####
done with tests
killing spiffy
(base)
# xuanzitao @ xuanzitao-G3-3579 in ~/work/ComputerNetwork/Starter Code/Starter C
ode/cp1 on git:main x [23:37:55]
```

## 二、checkpoint2

### test1

```
./checkpoint2.rb

=====RECEIVED DATA=====

=====SEND ACK=====

SEQ NUM: 375
STATUS: 0
STATUS: 0
STATUS: 0
STATUS: 0
SEND TO: 1111
SENT ACK: 375
SENT SEQ: 0
DATA NUMBER SENT: 2016
145
SEND TO: 1111
SENT ACK: 144
SENT SEQ: 0
DATA NUMBER SENT: 2016
***** ref_peer exiting after 2 connections, as specified by -x flag *****
##### Test 1 Passed! #####
```

### test2

```
xuanzitao@xuanzitao-G3-3579: ~/work/ComputerNetwork/Starter Code/...
VERSION: 1
PACKET TYPE: 4
HEADER LENGTH: 16
TOTAL PACKET LENGTH: 16
=====2222=====

=====RECEIVED ACK=====

ACK NUM: 512
INFO: C.tar
INFO: 3
INFO: 2222
NEXT TIME: 993832
id = 1, hash = 78585121ee33fbb6666bc4bf1a8498c04b2758e8
GOT test2.tar
***** ref_peer exiting after 2 connections, as specified by -x flag *****
***
##### Test 2 Passed! #####
done with tests
killing spiffy
(base)
# xuanzitao @ xuanzitao-G3-3579 in ~/work/ComputerNetwork/Starter Code/Starter C
ode/cp2 on git:main x [23:37:16]
$
```

### 三、checkpoint3

test1

```
./checkpoint3.rb
*****
NOP!!!
##### Test 1 Passed! #####
15-441 PROJECT 2 PEER

chunk-file:      C.chunks
has-chunk-file:  B.chunks
max-conn:        4
peer-identity:   1
peer-list-file:  nodes.map
  peer 2: 127.0.0.1:2222
  peer 1: 127.0.0.1:1111
Spiffy local stuff: 00000000:1111
Spiffy setup complete. 127.0.0.1:15441
Delete this line after testing.
Spiffy local stuff: 0100007f:2222
Spiffy setup complete. 127.0.0.1:15441
Delete this line after testing.
Handling user GET for (test2.chunks, test2.tar)
user requested the following 2 chunks:
id = 0, hash = 3b9f916bbf59021ab781c9f2456df90a0102079f
id = 1, hash = 78585121ee33fbb6666bc4bf1a8498c04b2758e8
creating Control packet of type 0 with 2 chunks
MAGTC: 15441
```

test2

```
xuanzitao@xuanzitao-G3-3579: ~/work/ComputerNetwork/Starter Code/...
NEXT TIME: 1000021
FILE NAME: C.tar
2047
LAST MODIFIED TIME: 1608478551823729
SEND TO: 2222
SENT ACK: 0
SENT SEQ: 512
DATA NUMBER SENT: 2016
NEXT TIME: 1000025
FILE NAME: C.tar
2047
LAST MODIFIED TIME: 1608478552824629
SEND TO: 2222
SENT ACK: 0
SENT SEQ: 512
DATA NUMBER SENT: 2016
NEXT TIME: 1000055
##### Test 2 Passed! #####
done with tests
killing spiffy
(base)
# xuanzitao @ xuanzitao-G3-3579 in ~/work/ComputerNetwork/Starter Code/Starter C
ode/cp3 on git:main x [23:35:52]
$
```

#### 四、concurrenttest

```
xuanzitao@xuanzitao-G3-3579: ~/work/ComputerNetwork/Starter Code/...
=====SEND ACK=====

SEQ NUM: 375
STATUS: 0
STATUS: 1
16777343
DOWNLOAD ID: 1
EXPECTED SEQ: 375
CURR POS OF ALL: 1023
REAL LENGTH OF DATALOAD: 688
SEND TO: 2222
SENT ACK: 375
SENT SEQ: 0
DATA NUMBER SENT: 2016
GOT!***** ref_peer exiting after 1 connections, as specified by -x flag *****
***
NOP!!!
##### Test 1 Data is Correct #####
killing spiffy after test1
done with test
(base)
# xuanzitao @ xuanzitao-G3-3579 in ~/work/ComputerNetwork/Starter Code/Starter C
ode/concurrenttest on git:main x [23:21:24]
$
```