

Course: Programming Fundamental - ENSF 337

Lab #: Lab 4

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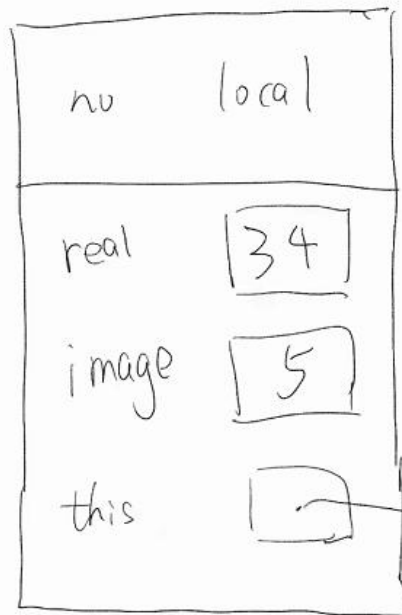
Lab Section: B01

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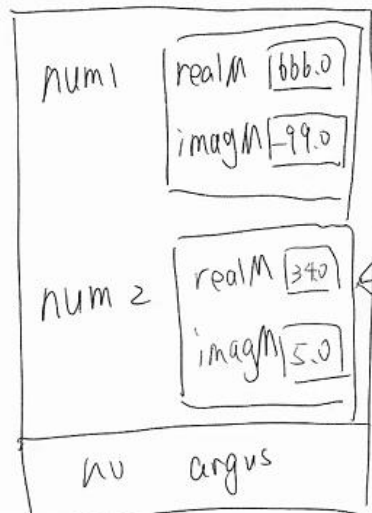
## Question A

Point 1:

AR Cplx::Cplx(double real, double image)

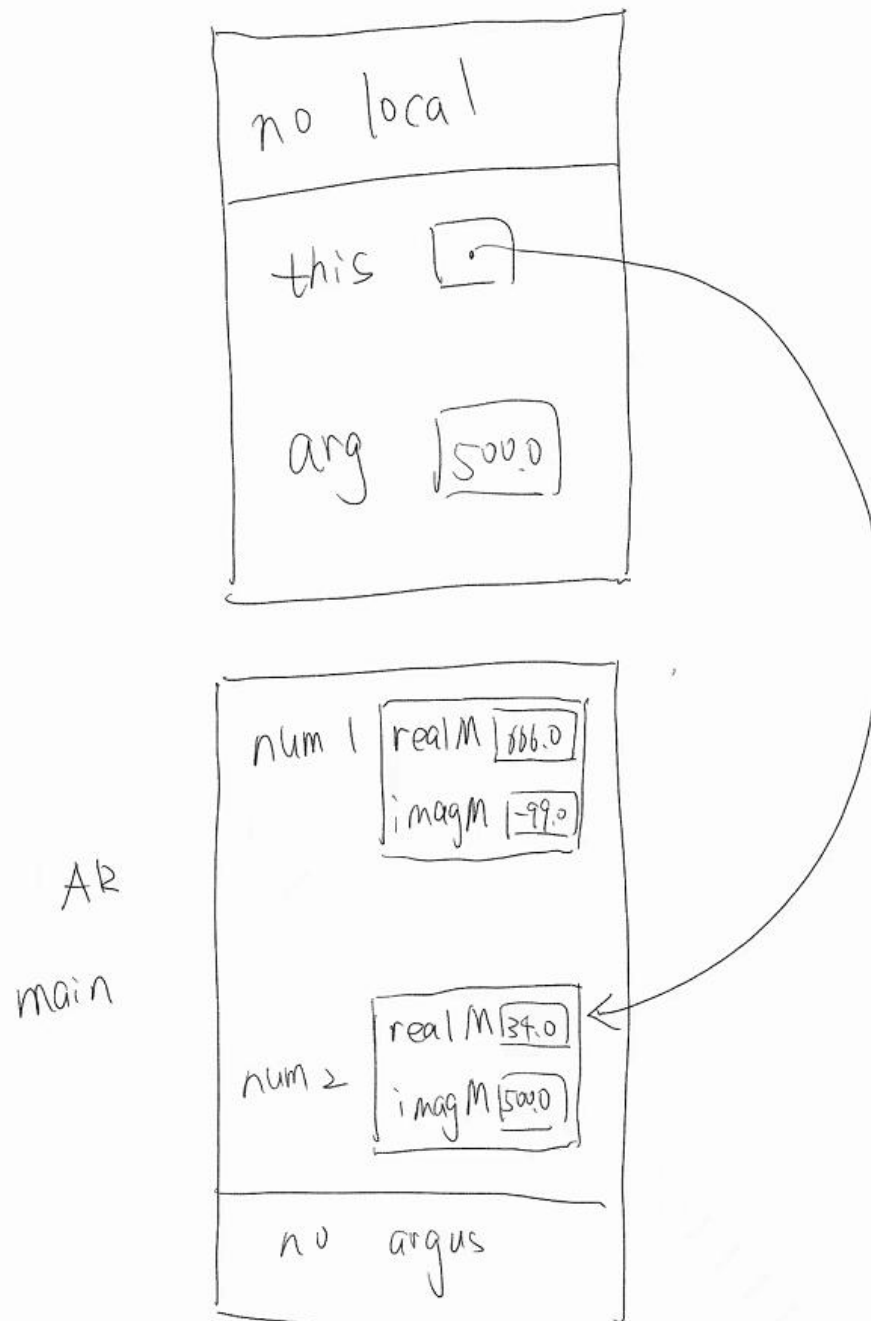


AR  
main



Point 2:

AR Cplx::set Imaginary Part (double arg)



## Question C

```
Object t1 is created. Expected time is: 00:00:00
00:00:00
Object t1 incremented by 86400 seconds. Expected time is: 00:00:00
00:00:00
Object t2 is created. Expected time is: 00:00:05
00:00:05
Object t2 decremented by 6 seconds. Expected time is: 23:59:59
23:59:59
After setting t1's hour to 21. Expected time is: 21:00:00
21:00:00
Setting t1's hour to 60 (invalid value). Expected time is: 21:00:00
21:00:00
Setting t2's minute to 20. Expected time is: 23:20:59
23:20:59
Setting t2's second to 50. Expected time is 23:20:50
23:20:50
Adding 2350 seconds to t2. Expected time is: 00:00:00
00:00:00
Adding 72000 seconds to t2. Expected time is: 20:00:00
20:00:00
Adding 216000 seconds to t2. Expected time is: 08:00:00
08:00:00
Object t3 is created. Expected time is: 00:00:00
00:00:00
Adding 1 second to clock t3. Expected time is: 00:00:01
00:00:01
After calling decrement for t3. Expected time is: 00:00:00
00:00:00
After incrementing t3 by 86400 seconds. Expected time is: 00:00:00
00:00:00
After decrementing t3 by 86401 seconds. Expected time is: 23:59:59
23:59:59
After decrementing t3 by 864010 seconds. Expected time is: 23:59:49
23:59:49
t4 is created with invalid value (25 for hour). Expected to show: 00:00:00
00:00:00
t5 is created with invalid value (-8 for minute). Expected to show: 00:00:00
00:00:00
t6 is created with invalid value (61 for second). Expected to show: 00:00:00
00:00:00
t7 is created with invalid value (negative value). Expected to show: 00:00:00
00:00:00
```

## Question D

```
Object v1 is expected to display: 45 69 12
45 69 12
Object v2 is expected to diaplay: 3000 6000 7000 8000
3000 6000 7000 8000

After two calls to at v1 is expected to display: 1000 2000 12
1000 2000 12

v2 expected to display: 3000 6000 7000 8000 21 28
3000 6000 7000 8000 21 28

After copy v2 is expected to display: 1000 2000 12
1000 2000 12

v1 is expected to display: 1000 2000 8000
1000 2000 8000

v3 is expected to diplay: 1000 2000 12
1000 2000 12

v2 is expected to display: -333 2000 12
-333 2000 12

v4 is expected to diplay: 1000 2000 8000
1000 2000 8000

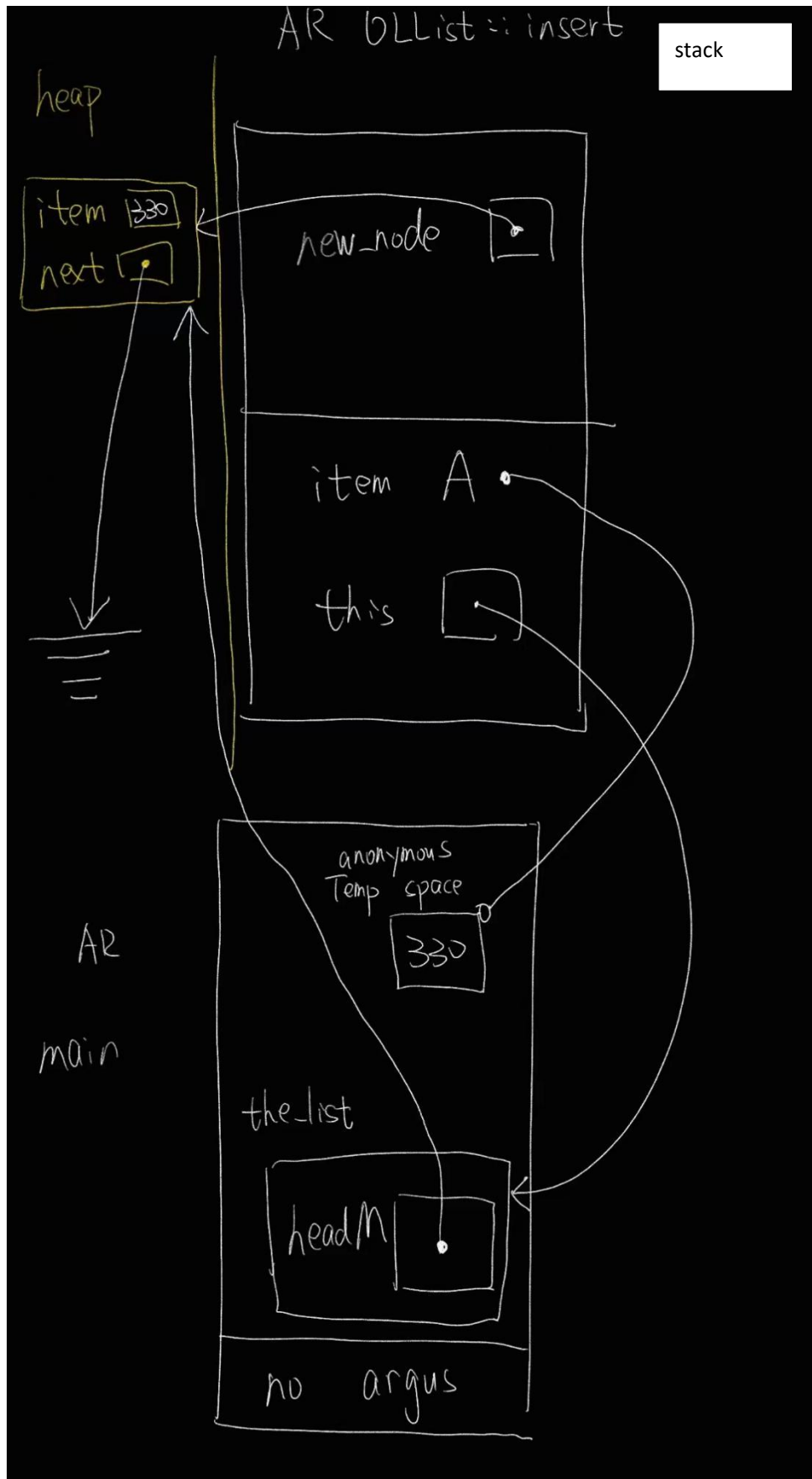
v1 after self-copy is expected to diplay: -1000 2000 8000
-1000 2000 8000

v1 after chain-copy is expected to diplay: 1000 2000 12
1000 2000 12

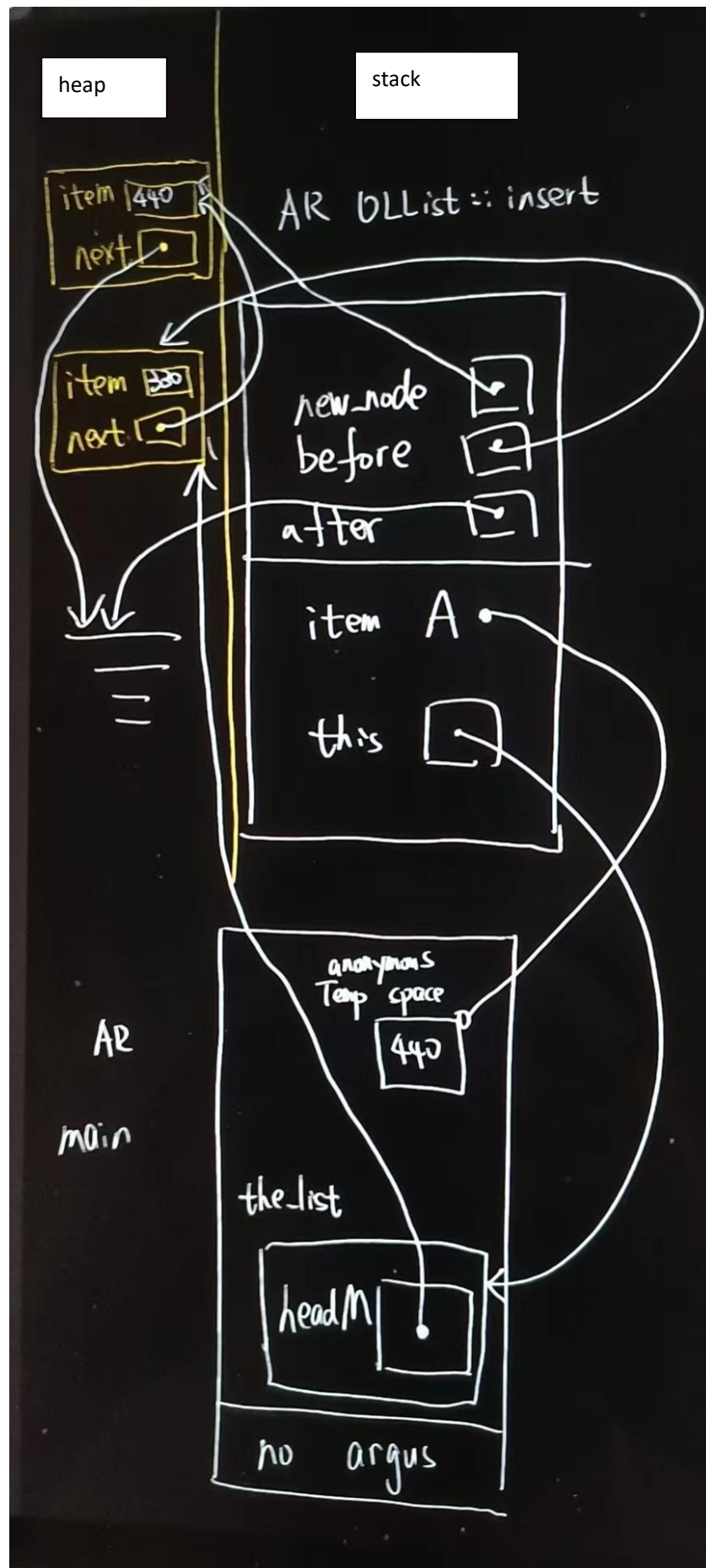
v2 after chain-copy is expected to diplay: 1000 2000 12
1000 2000 12
```

## Question E

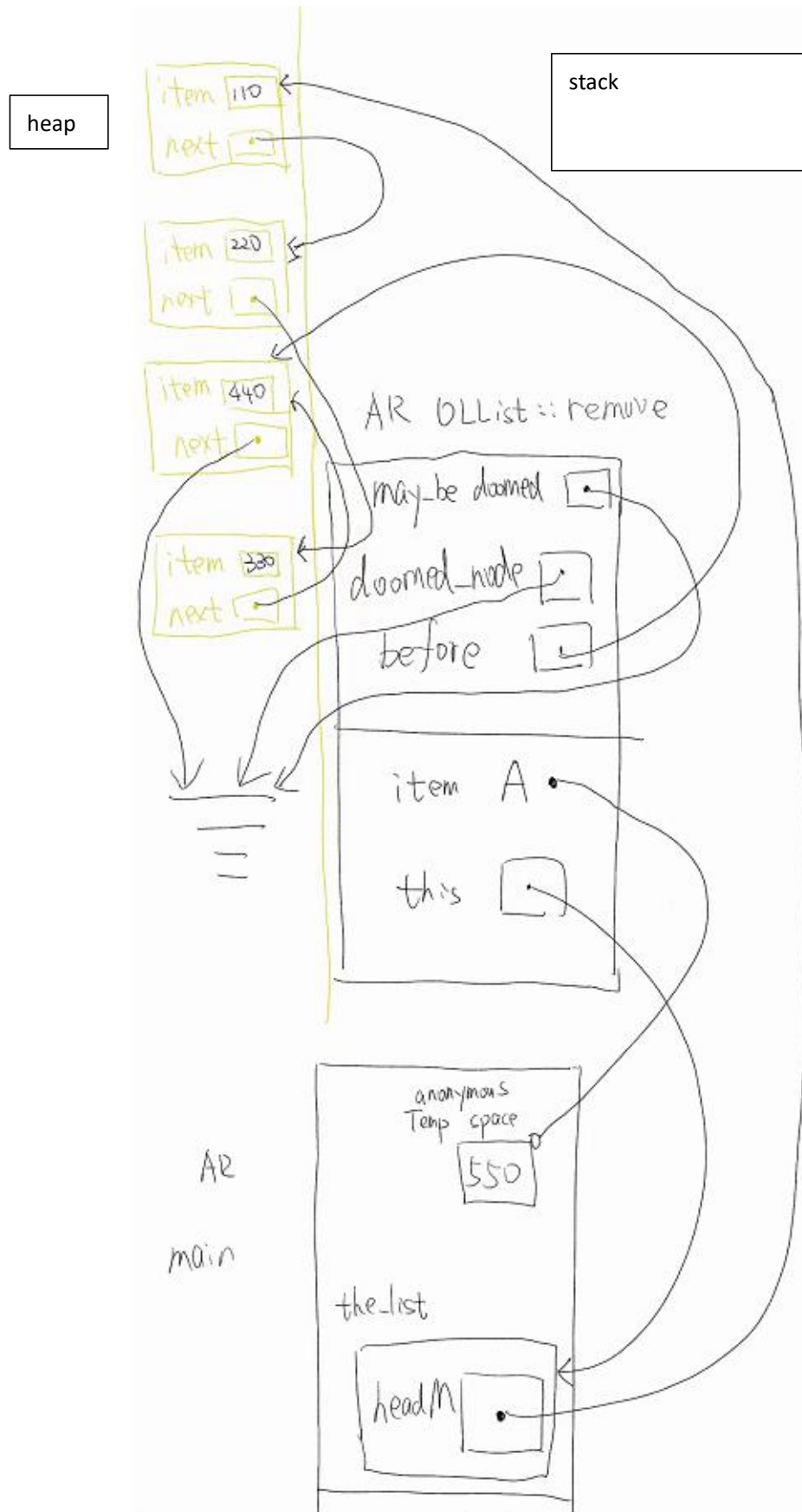
Point 1:



Point 2:



Point 3:





## Question F

```
List just after creation. expected to be [ ]
[ ]
the_list after some insertions. Expected to be: [ 99, 110, 120, 220, 330, 440, 550 ]
[ 99, 110, 120, 220, 330, 440, 550 ]
testing for copying lists ...
other_list as a copy of the_list: expected to be [ 99, 110, 120, 220, 330, 440, 550 ]
[ 99, 110, 120, 220, 330, 440, 550 ]
third_list as a copy of the_list: expected to be: [ 99, 110, 120, 220, 330, 440, 550 ]
[ 99, 110, 120, 220, 330, 440, 550 ]
testing for removing and chaining assignment operator...
the_list after some removals: expected to be: [ 99, 110, 120, 220, 440 ]
[ 99, 110, 120, 220, 440 ]
printing other_list one more time: expected to be: [ 99, 110, 120, 220, 330, 440, 550 ]
[ 99, 110, 120, 220, 330, 440, 550 ]
printing third_list one more time: expected to be: [ 99, 110, 120, 220, 330, 440, 550 ]
[ 99, 110, 120, 220, 330, 440, 550 ]
chaining assignment operator ...
the_list after chaining assignment operator: expected to be: [ 99, 110, 120, 220, 440 ]
[ 99, 110, 120, 220, 440 ]
other_list after chaining: expected to be: [ 99, 110, 120, 220, 440 ]
[ 99, 110, 120, 220, 440 ]
third_list after chaining: expected to be: [ 99, 110, 120, 220, 440 ]
[ 99, 110, 120, 220, 440 ]
```