

## QUIZ 8

### COMP9021 PRINCIPLES OF PROGRAMMING

```
$ python3
...
>>> from quiz_8 import *
>>> print(CircularList())
[]
>>> L = CircularList(3)
>>> print(L)
[3]
>>> L = CircularList(0, 'Right', 3.14, 1, 2, 3)
>>> print(L)
[0, Right, 3.14, 1, 2, 3]
>>> len(L)
6
>>> L = CircularList(*range(5))
>>> L
[0, 1, 2, 3, 4]
>>> L[50] = 100
>>> L
[100, 1, 2, 3, 4]
>>> L[214538] = 30
>>> L
[100, 1, 2, 30, 4]
>>> L[-676383] = 20
>>> L
[100, 1, 20, 30, 4]
>>> L = CircularList(*range(10, 20))
>>> L
[10, 11, 12, 13, 14, 15, 16, 17, 18, 19]
>>> L[3]
13
>>> L[13]
13
>>> L[23]
13
>>> L[-7]
13
>>> L[-17]
13
>>> L[22446]
16
```

```
>>> L[:: 0]
...
ValueError: slice step cannot be zero
>>> L[:]
[10, 11, 12, 13, 14, 15, 16, 17, 18, 19]
>>> L[0 : :]
[10, 11, 12, 13, 14, 15, 16, 17, 18, 19]
>>> L[2 : :]
[12, 13, 14, 15, 16, 17, 18, 19]
>>> L[8 : :]
[18, 19]
>>> L[10 : :]
[]
>>> L[20 : :]
[]
>>> L[-1 : :]
[19, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19]
>>> L[-3 : :]
[17, 18, 19, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19]
>>> L[-14 : :]
[16, 17, 18, 19, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19]
>>> L[:: -1]
[19, 18, 17, 16, 15, 14, 13, 12, 11, 10]
>>> L[-1 :: -1]
[19, 18, 17, 16, 15, 14, 13, 12, 11, 10]
>>> L[-3 :: -1]
>>> L[-10 :: -1]
[10]
>>> L[-11 :: -1]
[]
>>> L[8 :: -1]
[18, 17, 16, 15, 14, 13, 12, 11, 10, 19, 18, 17, 16, 15, 14, 13, 12, 11, 10]
>>> L[: 3 :]
[10, 11, 12]
>>> L[: 14 :]
[10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 10, 11, 12, 13]
>>> L[: -6 :]
[]
>>> L[: -6 : -1]
[19, 18, 17, 16, 15]
>>> L[: -12 : -1]
[19, 18, 17, 16, 15, 14, 13, 12, 11, 10, 19]
>>> L[: 0 : -1]
[]
```

```
>>> L[2 : -4 : 3]
[]
>>> L[2 : 8 : 3]
[12, 15]
>>> L[2 : 18 : 3]
[12, 15, 18, 11, 14, 17]
>>> L[2 : 28 : 3]
[12, 15, 18, 11, 14, 17, 10, 13, 16]
>>> L[2 : 38 : 3]
[12, 15, 18, 11, 14, 17, 10, 13, 16, 19, 12, 15]
>>> L[3 : 18 : 25]
[13]
>>> L[3 : 38 : 25]
[13, 18]
>>> L[3 : 98 : 25]
[13, 18, 13, 18]
>>> L[6 : 12 : -4]
[]
>>> L[6 : -12 : -4]
[16, 12, 18, 14, 10]
>>> L[6 : -31 : -4]
[16, 12, 18, 14, 10, 16, 12, 18, 14, 10]
>>> L
[10, 11, 12, 13, 14, 15, 16, 17, 18, 19]
```