```
/Users/alaa/PycharmProjects/pythonProject1/.venv/bin/python/Users/alaa/
    PycharmProjects/pythonProject1/.venv/rlConfig-loops.py
 2 loops number = 10
 3 Loop indexes: [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]
 4 Loop sequences:
 5 [0, 1, 5, 9, 13, 12, 8, 4]
 6 [3, 7, 11, 15, 14, 10, 6, 2]
 7 [0, 1, 2, 6, 10, 14, 13, 12, 8, 4]
 8 [3, 7, 11, 15, 14, 13, 9, 5, 1, 2]
 9 [0, 4, 8, 12, 13, 14, 15, 11, 7, 3, 2, 1]
10 [0, 1, 2, 3, 7, 6, 5, 4]
11 [4, 5, 6, 7, 11, 10, 9, 8]
12 [8, 9, 10, 11, 15, 14, 13, 12]
13 [5, 6, 10, 9]
14 [5, 9, 10, 6]
15
16 Min Node Index: 0
17 Max Node Index: 15
18 NxN Size: 16
19 NxN Configuration: 4x4
20
21 Main Layer:
22 [0, 1, 2, 3]
23 [4, 5, 6, 7]
24 [8, 9, 10, 11]
25 [12, 13, 14, 15]
26
27 Inner Layer 1 (Configuration 2x2):
28 [5, 6]
29 [9, 10]
30
31 Main Layer Loops:
32 Loop 1: [0, 1, 5, 9, 13, 12, 8, 4]
33 Loop 2: [3, 7, 11, 15, 14, 10, 6, 2]
34 Loop 3: [0, 1, 2, 6, 10, 14, 13, 12, 8, 4]
35 Loop 4: [3, 7, 11, 15, 14, 13, 9, 5, 1, 2]
36 Loop 5: [0, 4, 8, 12, 13, 14, 15, 11, 7, 3, 2, 1]
37 Loop 6: [0, 1, 2, 3, 7, 6, 5, 4]
38 Loop 7: [4, 5, 6, 7, 11, 10, 9, 8]
39 Loop 8: [8, 9, 10, 11, 15, 14, 13, 12]
40 Loop 9: [5, 6, 10, 9]
41 Loop 10: [5, 9, 10, 6]
42
43 Inner Layer 1 (Configuration 2x2) Loops:
44 Loop 9: [5, 6, 10, 9]
45 Loop 10: [5, 9, 10, 6]
46
47
   Process finished with exit code 0
48
```