```
3 Vertices {0,1,2}
Total Eulerian SbGraph = 110
Notes: in Edge(u,v,k), u <-> v, k is parallel index (default value = 0 (single edge))
===========
Groups from 1 edges
_____
[(0, 0, 0)]
        Vertices: [0]
        Edges: [(0, 0, 0)]
        IsElrn: True
        ElrnCycle : [(0, 0)]
[(1, 1, 0)]
        Vertices: [1]
        Edges: [(1, 1, 0)]
        IsElrn: True
        ElrnCycle : [(1, 1)]
[(2, 2, 0)]
        Vertices: [2]
        Edges: [(2, 2, 0)]
        IsElrn: True
        ElrnCycle : [(2, 2)]
_____
Groups from 2 edges
[(0, 1, 0), (0, 1, 1)]
        Vertices: [0, 1]
        Edges: [(0, 1, 0), (0, 1, 1)]
        IsElrn: True
        ElrnCycle: [(0, 1), (1, 0)]
[(0, 2, 0), (0, 2, 1)]
        Vertices: [0, 2]
        Edges: [(0, 2, 0), (0, 2, 1)]
```

```
IsElrn: True
         ElrnCycle: [(0, 2), (2, 0)]
[(1, 2, 0), (1, 2, 1)]
         Vertices: [1, 2]
         Edges: [(1, 2, 0), (1, 2, 1)]
         IsElrn: True
         ElrnCycle: [(1, 2), (2, 1)]
============
Groups from 3 edges
[(0, 0, 0), (0, 1, 0), (0, 1, 1)]
         Vertices: [0, 1]
         Edges: [(0, 0, 0), (0, 1, 0), (0, 1, 1)]
         IsElrn: True
         ElrnCycle: [(0, 1), (1, 0), (0, 0)]
[(0, 0, 0), (0, 2, 0), (0, 2, 1)]
         Vertices: [0, 2]
         Edges: [(0, 0, 0), (0, 2, 0), (0, 2, 1)]
         IsElrn: True
         ElrnCycle: [(0, 2), (2, 0), (0, 0)]
[(0, 1, 0), (0, 1, 1), (1, 1, 0)]
         Vertices: [0, 1]
         Edges: [(0, 1, 0), (0, 1, 1), (1, 1, 0)]
         IsElrn: True
         ElrnCycle: [(0, 1), (1, 1), (1, 0)]
[(0, 1, 0), (0, 2, 0), (1, 2, 0)]
         Vertices: [0, 1, 2]
         Edges: [(0, 1, 0), (0, 2, 0), (1, 2, 0)]
         IsElrn: True
         ElrnCycle: [(0, 2), (2, 1), (1, 0)]
[(0, 1, 0), (0, 2, 0), (1, 2, 1)]
         Vertices: [0, 1, 2]
```

Edges: [(0, 1, 0), (0, 2, 0), (1, 2, 1)]

IsElrn: True

ElrnCycle: [(0, 2), (2, 1), (1, 0)]

[(0, 1, 0), (0, 2, 1), (1, 2, 0)]

Vertices: [0, 1, 2]

Edges: [(0, 1, 0), (0, 2, 1), (1, 2, 0)]

IsElrn: True

ElrnCycle: [(0, 2), (2, 1), (1, 0)]

[(0, 1, 0), (0, 2, 1), (1, 2, 1)]

Vertices: [0, 1, 2]

Edges: [(0, 1, 0), (0, 2, 1), (1, 2, 1)]

IsElrn : True

ElrnCycle: [(0, 2), (2, 1), (1, 0)]

[(0, 1, 1), (0, 2, 0), (1, 2, 0)]

Vertices : [0, 1, 2]

Edges: [(0, 1, 1), (0, 2, 0), (1, 2, 0)]

IsElrn: True

ElrnCycle: [(0, 2), (2, 1), (1, 0)]

[(0, 1, 1), (0, 2, 0), (1, 2, 1)]

Vertices: [0, 1, 2]

Edges: [(0, 1, 1), (0, 2, 0), (1, 2, 1)]

IsElrn: True

ElrnCycle: [(0, 2), (2, 1), (1, 0)]

[(0, 1, 1), (0, 2, 1), (1, 2, 0)]

Vertices : [0, 1, 2]

Edges: [(0, 1, 1), (0, 2, 1), (1, 2, 0)]

IsElrn: True

ElrnCycle: [(0, 2), (2, 1), (1, 0)]

[(0, 1, 1), (0, 2, 1), (1, 2, 1)]

Vertices : [0, 1, 2]

Edges: [(0, 1, 1), (0, 2, 1), (1, 2, 1)]

```
ElrnCycle: [(0, 2), (2, 1), (1, 0)]
[(0, 2, 0), (0, 2, 1), (2, 2, 0)]
         Vertices: [0, 2]
         Edges: [(0, 2, 0), (0, 2, 1), (2, 2, 0)]
         IsElrn: True
         ElrnCycle: [(0, 2), (2, 2), (2, 0)]
[(1, 1, 0), (1, 2, 0), (1, 2, 1)]
         Vertices: [1, 2]
         Edges: [(1, 1, 0), (1, 2, 0), (1, 2, 1)]
         IsElrn: True
         ElrnCycle: [(1, 2), (2, 1), (1, 1)]
[(1, 2, 0), (1, 2, 1), (2, 2, 0)]
         Vertices: [1, 2]
         Edges: [(1, 2, 0), (1, 2, 1), (2, 2, 0)]
         IsElrn: True
         ElrnCycle: [(1, 2), (2, 2), (2, 1)]
===============
Groups from 4 edges
[(0, 0, 0), (0, 1, 0), (0, 1, 1), (1, 1, 0)]
         Vertices: [0, 1]
         Edges: [(0, 0, 0), (0, 1, 0), (0, 1, 1), (1, 1, 0)]
         IsElrn: True
         ElrnCycle: [(0, 1), (1, 1), (1, 0), (0, 0)]
[(0, 0, 0), (0, 1, 0), (0, 2, 0), (1, 2, 0)]
         Vertices : [0, 1, 2]
         Edges: [(0, 0, 0), (0, 1, 0), (0, 2, 0), (1, 2, 0)]
         IsElrn: True
         ElrnCycle: [(0, 2), (2, 1), (1, 0), (0, 0)]
[(0, 0, 0), (0, 1, 0), (0, 2, 0), (1, 2, 1)]
         Vertices: [0, 1, 2]
```

Edges: [(0, 0, 0), (0, 1, 0), (0, 2, 0), (1, 2, 1)]

```
IsElrn: True
```

ElrnCycle: [(0, 2), (2, 1), (1, 0), (0, 0)]

[(0, 0, 0), (0, 1, 0), (0, 2, 1), (1, 2, 0)]

Vertices : [0, 1, 2]

Edges: [(0, 0, 0), (0, 1, 0), (0, 2, 1), (1, 2, 0)]

IsElrn: True

ElrnCycle: [(0, 2), (2, 1), (1, 0), (0, 0)]

[(0, 0, 0), (0, 1, 0), (0, 2, 1), (1, 2, 1)]

Vertices : [0, 1, 2]

Edges: [(0, 0, 0), (0, 1, 0), (0, 2, 1), (1, 2, 1)]

IsElrn: True

ElrnCycle: [(0, 2), (2, 1), (1, 0), (0, 0)]

[(0, 0, 0), (0, 1, 1), (0, 2, 0), (1, 2, 0)]

Vertices : [0, 1, 2]

Edges: [(0, 0, 0), (0, 1, 1), (0, 2, 0), (1, 2, 0)]

IsElrn: True

ElrnCycle: [(0, 2), (2, 1), (1, 0), (0, 0)]

[(0, 0, 0), (0, 1, 1), (0, 2, 0), (1, 2, 1)]

Vertices : [0, 1, 2]

Edges: [(0, 0, 0), (0, 1, 1), (0, 2, 0), (1, 2, 1)]

IsElrn: True

ElrnCycle: [(0, 2), (2, 1), (1, 0), (0, 0)]

[(0, 0, 0), (0, 1, 1), (0, 2, 1), (1, 2, 0)]

Vertices : [0, 1, 2]

Edges: [(0, 0, 0), (0, 1, 1), (0, 2, 1), (1, 2, 0)]

IsElrn: True

ElrnCycle: [(0, 2), (2, 1), (1, 0), (0, 0)]

[(0, 0, 0), (0, 1, 1), (0, 2, 1), (1, 2, 1)]

Vertices: [0, 1, 2]

Edges: [(0, 0, 0), (0, 1, 1), (0, 2, 1), (1, 2, 1)]

IsElrn: True

ElrnCycle: [(0, 2), (2, 1), (1, 0), (0, 0)]

```
[(0, 0, 0), (0, 2, 0), (0, 2, 1), (2, 2, 0)]
          Vertices: [0, 2]
          Edges: [(0, 0, 0), (0, 2, 0), (0, 2, 1), (2, 2, 0)]
          IsElrn: True
          ElrnCycle: [(0, 2), (2, 2), (2, 0), (0, 0)]
[(0, 1, 0), (0, 1, 1), (0, 2, 0), (0, 2, 1)]
          Vertices : [0, 1, 2]
          Edges: [(0, 1, 0), (0, 1, 1), (0, 2, 0), (0, 2, 1)]
          IsElrn: True
          ElrnCycle: [(0, 2), (2, 0), (0, 1), (1, 0)]
[(0, 1, 0), (0, 1, 1), (1, 2, 0), (1, 2, 1)]
          Vertices : [0, 1, 2]
          Edges: [(0, 1, 0), (0, 1, 1), (1, 2, 0), (1, 2, 1)]
          IsElrn: True
          ElrnCycle: [(0, 1), (1, 2), (2, 1), (1, 0)]
[(0, 1, 0), (0, 2, 0), (1, 1, 0), (1, 2, 0)]
          Vertices: [0, 1, 2]
          Edges: [(0, 1, 0), (0, 2, 0), (1, 1, 0), (1, 2, 0)]
          IsElrn: True
          ElrnCycle: [(0, 2), (2, 1), (1, 1), (1, 0)]
[(0, 1, 0), (0, 2, 0), (1, 1, 0), (1, 2, 1)]
          Vertices : [0, 1, 2]
          Edges: [(0, 1, 0), (0, 2, 0), (1, 1, 0), (1, 2, 1)]
          IsElrn: True
          ElrnCycle: [(0, 2), (2, 1), (1, 1), (1, 0)]
[(0, 1, 0), (0, 2, 0), (1, 2, 0), (2, 2, 0)]
          Vertices: [0, 1, 2]
          Edges: [(0, 1, 0), (0, 2, 0), (1, 2, 0), (2, 2, 0)]
          IsElrn: True
          ElrnCycle: [(0, 2), (2, 2), (2, 1), (1, 0)]
[(0, 1, 0), (0, 2, 0), (1, 2, 1), (2, 2, 0)]
```

Vertices: [0, 1, 2]

Edges: [(0, 1, 0), (0, 2, 0), (1, 2, 1), (2, 2, 0)]

IsElrn: True

ElrnCycle: [(0, 2), (2, 2), (2, 1), (1, 0)]

[(0, 1, 0), (0, 2, 1), (1, 1, 0), (1, 2, 0)]

Vertices: [0, 1, 2]

Edges: [(0, 1, 0), (0, 2, 1), (1, 1, 0), (1, 2, 0)]

IsElrn: True

ElrnCycle: [(0, 2), (2, 1), (1, 1), (1, 0)]

[(0, 1, 0), (0, 2, 1), (1, 1, 0), (1, 2, 1)]

Vertices : [0, 1, 2]

Edges: [(0, 1, 0), (0, 2, 1), (1, 1, 0), (1, 2, 1)]

Is Elrn: True

ElrnCycle: [(0, 2), (2, 1), (1, 1), (1, 0)]

[(0, 1, 0), (0, 2, 1), (1, 2, 0), (2, 2, 0)]

Vertices: [0, 1, 2]

Edges: [(0, 1, 0), (0, 2, 1), (1, 2, 0), (2, 2, 0)]

IsElrn: True

ElrnCycle: [(0, 2), (2, 2), (2, 1), (1, 0)]

[(0, 1, 0), (0, 2, 1), (1, 2, 1), (2, 2, 0)]

Vertices : [0, 1, 2]

Edges: [(0, 1, 0), (0, 2, 1), (1, 2, 1), (2, 2, 0)]

IsElrn: True

ElrnCycle: [(0, 2), (2, 2), (2, 1), (1, 0)]

[(0, 1, 1), (0, 2, 0), (1, 1, 0), (1, 2, 0)]

Vertices: [0, 1, 2]

Edges: [(0, 1, 1), (0, 2, 0), (1, 1, 0), (1, 2, 0)]

IsElrn: True

ElrnCycle: [(0, 2), (2, 1), (1, 1), (1, 0)]

[(0, 1, 1), (0, 2, 0), (1, 1, 0), (1, 2, 1)]

Vertices : [0, 1, 2]

Edges: [(0, 1, 1), (0, 2, 0), (1, 1, 0), (1, 2, 1)]

```
ElrnCycle: [(0, 2), (2, 1), (1, 1), (1, 0)]
[(0, 1, 1), (0, 2, 0), (1, 2, 0), (2, 2, 0)]
         Vertices : [0, 1, 2]
         Edges: [(0, 1, 1), (0, 2, 0), (1, 2, 0), (2, 2, 0)]
         IsElrn: True
         ElrnCycle: [(0, 2), (2, 2), (2, 1), (1, 0)]
[(0, 1, 1), (0, 2, 0), (1, 2, 1), (2, 2, 0)]
         Vertices : [0, 1, 2]
         Edges: [(0, 1, 1), (0, 2, 0), (1, 2, 1), (2, 2, 0)]
         IsElrn: True
         ElrnCycle: [(0, 2), (2, 2), (2, 1), (1, 0)]
[(0, 1, 1), (0, 2, 1), (1, 1, 0), (1, 2, 0)]
         Vertices : [0, 1, 2]
         Edges: [(0, 1, 1), (0, 2, 1), (1, 1, 0), (1, 2, 0)]
         IsElrn: True
         ElrnCycle: [(0, 2), (2, 1), (1, 1), (1, 0)]
[(0, 1, 1), (0, 2, 1), (1, 1, 0), (1, 2, 1)]
         Vertices : [0, 1, 2]
         Edges: [(0, 1, 1), (0, 2, 1), (1, 1, 0), (1, 2, 1)]
         IsElrn: True
         ElrnCycle: [(0, 2), (2, 1), (1, 1), (1, 0)]
[(0, 1, 1), (0, 2, 1), (1, 2, 0), (2, 2, 0)]
         Vertices : [0, 1, 2]
         Edges: [(0, 1, 1), (0, 2, 1), (1, 2, 0), (2, 2, 0)]
         IsElrn: True
```

ElrnCycle: [(0, 2), (2, 2), (2, 1), (1, 0)]

[(0, 1, 1), (0, 2, 1), (1, 2, 1), (2, 2, 0)]Vertices : [0, 1, 2]

Edges: [(0, 1, 1), (0, 2, 1), (1, 2, 1), (2, 2, 0)]

IsElrn: True

ElrnCycle: [(0, 2), (2, 2), (2, 1), (1, 0)]

[(0, 2, 0), (0, 2, 1), (1, 2, 0), (1, 2, 1)]

```
Vertices : [0, 1, 2]
         Edges: [(0, 2, 0), (0, 2, 1), (1, 2, 0), (1, 2, 1)]
         IsElrn: True
         ElrnCycle: [(0, 2), (2, 1), (1, 2), (2, 0)]
[(1, 1, 0), (1, 2, 0), (1, 2, 1), (2, 2, 0)]
         Vertices : [1, 2]
         Edges: [(1, 1, 0), (1, 2, 0), (1, 2, 1), (2, 2, 0)]
         IsElrn: True
         ElrnCycle: [(1, 2), (2, 2), (2, 1), (1, 1)]
Groups from 5 edges
_____
[(0, 0, 0), (0, 1, 0), (0, 1, 1), (0, 2, 0), (0, 2, 1)]
         Vertices : [0, 1, 2]
         Edges: [(0, 0, 0), (0, 1, 0), (0, 1, 1), (0, 2, 0), (0, 2, 1)]
         IsElrn: True
         ElrnCycle: [(0, 2), (2, 0), (0, 1), (1, 0), (0, 0)]
[(0, 0, 0), (0, 1, 0), (0, 1, 1), (1, 2, 0), (1, 2, 1)]
         Vertices : [0, 1, 2]
         Edges: [(0, 0, 0), (0, 1, 0), (0, 1, 1), (1, 2, 0), (1, 2, 1)]
         IsElrn: True
         ElrnCycle: [(0, 1), (1, 2), (2, 1), (1, 0), (0, 0)]
[(0, 0, 0), (0, 1, 0), (0, 2, 0), (1, 1, 0), (1, 2, 0)]
         Vertices : [0, 1, 2]
         Edges: [(0, 0, 0), (0, 1, 0), (0, 2, 0), (1, 1, 0), (1, 2, 0)]
         IsElrn: True
         ElrnCycle: [(0, 2), (2, 1), (1, 1), (1, 0), (0, 0)]
[(0, 0, 0), (0, 1, 0), (0, 2, 0), (1, 1, 0), (1, 2, 1)]
         Vertices: [0, 1, 2]
         Edges: [(0, 0, 0), (0, 1, 0), (0, 2, 0), (1, 1, 0), (1, 2, 1)]
```

IsElrn: True
ElrnCycle: [(0, 2), (2, 1), (1, 1), (1, 0), (0, 0)]

```
[(0, 0, 0), (0, 1, 0), (0, 2, 0), (1, 2, 0), (2, 2, 0)]
          Vertices : [0, 1, 2]
          Edges: [(0, 0, 0), (0, 1, 0), (0, 2, 0), (1, 2, 0), (2, 2, 0)]
          IsElrn: True
          ElrnCycle: [(0, 2), (2, 2), (2, 1), (1, 0), (0, 0)]
[(0, 0, 0), (0, 1, 0), (0, 2, 0), (1, 2, 1), (2, 2, 0)]
          Vertices: [0, 1, 2]
          Edges: [(0, 0, 0), (0, 1, 0), (0, 2, 0), (1, 2, 1), (2, 2, 0)]
          IsElrn: True
          ElrnCycle: [(0, 2), (2, 2), (2, 1), (1, 0), (0, 0)]
[(0, 0, 0), (0, 1, 0), (0, 2, 1), (1, 1, 0), (1, 2, 0)]
          Vertices : [0, 1, 2]
          Edges: [(0, 0, 0), (0, 1, 0), (0, 2, 1), (1, 1, 0), (1, 2, 0)]
          IsElrn: True
          ElrnCycle: [(0, 2), (2, 1), (1, 1), (1, 0), (0, 0)]
[(0, 0, 0), (0, 1, 0), (0, 2, 1), (1, 1, 0), (1, 2, 1)]
          Vertices: [0, 1, 2]
          Edges: [(0, 0, 0), (0, 1, 0), (0, 2, 1), (1, 1, 0), (1, 2, 1)]
          IsElrn: True
          ElrnCycle: [(0, 2), (2, 1), (1, 1), (1, 0), (0, 0)]
[(0, 0, 0), (0, 1, 0), (0, 2, 1), (1, 2, 0), (2, 2, 0)]
          Vertices : [0, 1, 2]
          Edges: [(0, 0, 0), (0, 1, 0), (0, 2, 1), (1, 2, 0), (2, 2, 0)]
          IsElrn: True
          ElrnCycle: [(0, 2), (2, 2), (2, 1), (1, 0), (0, 0)]
[(0, 0, 0), (0, 1, 0), (0, 2, 1), (1, 2, 1), (2, 2, 0)]
          Vertices: [0, 1, 2]
          Edges: [(0, 0, 0), (0, 1, 0), (0, 2, 1), (1, 2, 1), (2, 2, 0)]
          IsElrn: True
          ElrnCycle: [(0, 2), (2, 2), (2, 1), (1, 0), (0, 0)]
[(0, 0, 0), (0, 1, 1), (0, 2, 0), (1, 1, 0), (1, 2, 0)]
```

Vertices: [0, 1, 2]

```
Edges: [(0, 0, 0), (0, 1, 1), (0, 2, 0), (1, 1, 0), (1, 2, 0)]
```

IsElrn: True

ElrnCycle: [(0, 2), (2, 1), (1, 1), (1, 0), (0, 0)]

[(0, 0, 0), (0, 1, 1), (0, 2, 0), (1, 1, 0), (1, 2, 1)]

Vertices : [0, 1, 2]

Edges: [(0, 0, 0), (0, 1, 1), (0, 2, 0), (1, 1, 0), (1, 2, 1)]

IsElrn: True

ElrnCycle: [(0, 2), (2, 1), (1, 1), (1, 0), (0, 0)]

[(0, 0, 0), (0, 1, 1), (0, 2, 0), (1, 2, 0), (2, 2, 0)]

Vertices : [0, 1, 2]

Edges: [(0, 0, 0), (0, 1, 1), (0, 2, 0), (1, 2, 0), (2, 2, 0)]

IsElrn: True

ElrnCycle: [(0, 2), (2, 2), (2, 1), (1, 0), (0, 0)]

[(0, 0, 0), (0, 1, 1), (0, 2, 0), (1, 2, 1), (2, 2, 0)]

Vertices: [0, 1, 2]

Edges: [(0, 0, 0), (0, 1, 1), (0, 2, 0), (1, 2, 1), (2, 2, 0)]

IsElrn: True

ElrnCycle: [(0, 2), (2, 2), (2, 1), (1, 0), (0, 0)]

[(0, 0, 0), (0, 1, 1), (0, 2, 1), (1, 1, 0), (1, 2, 0)]

Vertices : [0, 1, 2]

Edges: [(0, 0, 0), (0, 1, 1), (0, 2, 1), (1, 1, 0), (1, 2, 0)]

IsElrn: True

ElrnCycle: [(0, 2), (2, 1), (1, 1), (1, 0), (0, 0)]

[(0, 0, 0), (0, 1, 1), (0, 2, 1), (1, 1, 0), (1, 2, 1)]

Vertices : [0, 1, 2]

Edges: [(0, 0, 0), (0, 1, 1), (0, 2, 1), (1, 1, 0), (1, 2, 1)]

IsElrn: True

ElrnCycle: [(0, 2), (2, 1), (1, 1), (1, 0), (0, 0)]

[(0, 0, 0), (0, 1, 1), (0, 2, 1), (1, 2, 0), (2, 2, 0)]

Vertices : [0, 1, 2]

Edges: [(0, 0, 0), (0, 1, 1), (0, 2, 1), (1, 2, 0), (2, 2, 0)]

```
ElrnCycle: [(0, 2), (2, 2), (2, 1), (1, 0), (0, 0)]
[(0, 0, 0), (0, 1, 1), (0, 2, 1), (1, 2, 1), (2, 2, 0)]
          Vertices : [0, 1, 2]
          Edges: [(0, 0, 0), (0, 1, 1), (0, 2, 1), (1, 2, 1), (2, 2, 0)]
          IsElrn: True
          ElrnCycle: [(0, 2), (2, 2), (2, 1), (1, 0), (0, 0)]
[(0, 0, 0), (0, 2, 0), (0, 2, 1), (1, 2, 0), (1, 2, 1)]
          Vertices: [0, 1, 2]
          Edges: [(0, 0, 0), (0, 2, 0), (0, 2, 1), (1, 2, 0), (1, 2, 1)]
          IsElrn: True
          ElrnCycle: [(0, 2), (2, 1), (1, 2), (2, 0), (0, 0)]
[(0, 1, 0), (0, 1, 1), (0, 2, 0), (0, 2, 1), (1, 1, 0)]
          Vertices : [0, 1, 2]
          Edges: [(0, 1, 0), (0, 1, 1), (0, 2, 0), (0, 2, 1), (1, 1, 0)]
          IsElrn: True
          ElrnCycle: [(0, 2), (2, 0), (0, 1), (1, 1), (1, 0)]
[(0, 1, 0), (0, 1, 1), (0, 2, 0), (0, 2, 1), (2, 2, 0)]
          Vertices : [0, 1, 2]
          Edges: [(0, 1, 0), (0, 1, 1), (0, 2, 0), (0, 2, 1), (2, 2, 0)]
          IsElrn: True
          ElrnCycle: [(0, 2), (2, 2), (2, 0), (0, 1), (1, 0)]
[(0, 1, 0), (0, 1, 1), (1, 1, 0), (1, 2, 0), (1, 2, 1)]
          Vertices : [0, 1, 2]
          Edges: [(0, 1, 0), (0, 1, 1), (1, 1, 0), (1, 2, 0), (1, 2, 1)]
          IsElrn: True
          ElrnCycle: [(0, 1), (1, 2), (2, 1), (1, 1), (1, 0)]
[(0, 1, 0), (0, 1, 1), (1, 2, 0), (1, 2, 1), (2, 2, 0)]
          Vertices: [0, 1, 2]
          Edges: [(0, 1, 0), (0, 1, 1), (1, 2, 0), (1, 2, 1), (2, 2, 0)]
          IsElrn: True
          ElrnCycle: [(0, 1), (1, 2), (2, 2), (2, 1), (1, 0)]
```

[(0, 1, 0), (0, 2, 0), (1, 1, 0), (1, 2, 0), (2, 2, 0)]

```
Vertices : [0, 1, 2]
```

IsElrn: True

ElrnCycle: [(0, 2), (2, 2), (2, 1), (1, 1), (1, 0)]

[(0, 1, 0), (0, 2, 0), (1, 1, 0), (1, 2, 1), (2, 2, 0)]

Vertices: [0, 1, 2]

Edges: [(0, 1, 0), (0, 2, 0), (1, 1, 0), (1, 2, 1), (2, 2, 0)]

IsElrn: True

ElrnCycle: [(0, 2), (2, 2), (2, 1), (1, 1), (1, 0)]

[(0, 1, 0), (0, 2, 1), (1, 1, 0), (1, 2, 0), (2, 2, 0)]

Vertices : [0, 1, 2]

Edges: [(0, 1, 0), (0, 2, 1), (1, 1, 0), (1, 2, 0), (2, 2, 0)]

IsElrn: True

ElrnCycle: [(0, 2), (2, 2), (2, 1), (1, 1), (1, 0)]

[(0, 1, 0), (0, 2, 1), (1, 1, 0), (1, 2, 1), (2, 2, 0)]

Vertices : [0, 1, 2]

Edges: [(0, 1, 0), (0, 2, 1), (1, 1, 0), (1, 2, 1), (2, 2, 0)]

IsElrn: True

ElrnCycle: [(0, 2), (2, 2), (2, 1), (1, 1), (1, 0)]

[(0, 1, 1), (0, 2, 0), (1, 1, 0), (1, 2, 0), (2, 2, 0)]

Vertices : [0, 1, 2]

Edges: [(0, 1, 1), (0, 2, 0), (1, 1, 0), (1, 2, 0), (2, 2, 0)]

IsElrn: True

ElrnCycle: [(0, 2), (2, 2), (2, 1), (1, 1), (1, 0)]

[(0, 1, 1), (0, 2, 0), (1, 1, 0), (1, 2, 1), (2, 2, 0)]

Vertices : [0, 1, 2]

Edges: [(0, 1, 1), (0, 2, 0), (1, 1, 0), (1, 2, 1), (2, 2, 0)]

IsElrn: True

ElrnCycle: [(0, 2), (2, 2), (2, 1), (1, 1), (1, 0)]

[(0, 1, 1), (0, 2, 1), (1, 1, 0), (1, 2, 0), (2, 2, 0)]

Vertices: [0, 1, 2]

Edges: [(0, 1, 1), (0, 2, 1), (1, 1, 0), (1, 2, 0), (2, 2, 0)]

```
IsElrn : True
```

ElrnCycle: [(0, 2), (2, 2), (2, 1), (1, 1), (1, 0)]

[(0, 1, 1), (0, 2, 1), (1, 1, 0), (1, 2, 1), (2, 2, 0)]

Vertices: [0, 1, 2]

Edges: [(0, 1, 1), (0, 2, 1), (1, 1, 0), (1, 2, 1), (2, 2, 0)]

IsElrn: True

ElrnCycle: [(0, 2), (2, 2), (2, 1), (1, 1), (1, 0)]

[(0, 2, 0), (0, 2, 1), (1, 1, 0), (1, 2, 0), (1, 2, 1)]

Vertices : [0, 1, 2]

Edges: [(0, 2, 0), (0, 2, 1), (1, 1, 0), (1, 2, 0), (1, 2, 1)]

IsElrn: True

ElrnCycle: [(0, 2), (2, 1), (1, 1), (1, 2), (2, 0)]

[(0, 2, 0), (0, 2, 1), (1, 2, 0), (1, 2, 1), (2, 2, 0)]

Vertices : [0, 1, 2]

Edges: [(0, 2, 0), (0, 2, 1), (1, 2, 0), (1, 2, 1), (2, 2, 0)]

IsElrn: True

ElrnCycle: [(0, 2), (2, 2), (2, 1), (1, 2), (2, 0)]

Groups from 6 edges

[(0, 0, 0), (0, 1, 0), (0, 1, 1), (0, 2, 0), (0, 2, 1), (1, 1, 0)]

Vertices : [0, 1, 2]

Edges: [(0, 0, 0), (0, 1, 0), (0, 1, 1), (0, 2, 0), (0, 2, 1), (1, 1, 0)]

IsElrn: True

ElrnCycle: [(0, 2), (2, 0), (0, 1), (1, 1), (1, 0), (0, 0)]

[(0, 0, 0), (0, 1, 0), (0, 1, 1), (0, 2, 0), (0, 2, 1), (2, 2, 0)]

Vertices: [0, 1, 2]

Edges: [(0, 0, 0), (0, 1, 0), (0, 1, 1), (0, 2, 0), (0, 2, 1), (2, 2, 0)]

IsElrn: True

ElrnCycle: [(0, 2), (2, 2), (2, 0), (0, 1), (1, 0), (0, 0)]

[(0, 0, 0), (0, 1, 0), (0, 1, 1), (1, 1, 0), (1, 2, 0), (1, 2, 1)]

Vertices: [0, 1, 2]

```
Edges: [(0, 0, 0), (0, 1, 0), (0, 1, 1), (1, 1, 0), (1, 2, 0), (1, 2, 1)]
IsElrn: True
```

ElrnCycle: [(0, 1), (1, 2), (2, 1), (1, 1), (1, 0), (0, 0)]

[(0, 0, 0), (0, 1, 0), (0, 1, 1), (1, 2, 0), (1, 2, 1), (2, 2, 0)]

Vertices: [0, 1, 2]

Edges: [(0, 0, 0), (0, 1, 0), (0, 1, 1), (1, 2, 0), (1, 2, 1), (2, 2, 0)]

IsElrn: True

ElrnCycle: [(0, 1), (1, 2), (2, 2), (2, 1), (1, 0), (0, 0)]

[(0, 0, 0), (0, 1, 0), (0, 2, 0), (1, 1, 0), (1, 2, 0), (2, 2, 0)]

Vertices: [0, 1, 2]

Edges: [(0, 0, 0), (0, 1, 0), (0, 2, 0), (1, 1, 0), (1, 2, 0), (2, 2, 0)]

IsElrn: True

ElrnCycle: [(0, 2), (2, 2), (2, 1), (1, 1), (1, 0), (0, 0)]

[(0, 0, 0), (0, 1, 0), (0, 2, 0), (1, 1, 0), (1, 2, 1), (2, 2, 0)]

Vertices: [0, 1, 2]

Edges: [(0, 0, 0), (0, 1, 0), (0, 2, 0), (1, 1, 0), (1, 2, 1), (2, 2, 0)]

IsElrn: True

ElrnCycle: [(0, 2), (2, 2), (2, 1), (1, 1), (1, 0), (0, 0)]

[(0, 0, 0), (0, 1, 0), (0, 2, 1), (1, 1, 0), (1, 2, 0), (2, 2, 0)]

Vertices : [0, 1, 2]

Edges: [(0, 0, 0), (0, 1, 0), (0, 2, 1), (1, 1, 0), (1, 2, 0), (2, 2, 0)]

IsElrn: True

ElrnCycle: [(0, 2), (2, 2), (2, 1), (1, 1), (1, 0), (0, 0)]

[(0, 0, 0), (0, 1, 0), (0, 2, 1), (1, 1, 0), (1, 2, 1), (2, 2, 0)]

Vertices: [0, 1, 2]

Edges: [(0, 0, 0), (0, 1, 0), (0, 2, 1), (1, 1, 0), (1, 2, 1), (2, 2, 0)]

IsElrn: True

ElrnCycle: [(0, 2), (2, 2), (2, 1), (1, 1), (1, 0), (0, 0)]

[(0, 0, 0), (0, 1, 1), (0, 2, 0), (1, 1, 0), (1, 2, 0), (2, 2, 0)]

Vertices : [0, 1, 2]

Edges: [(0, 0, 0), (0, 1, 1), (0, 2, 0), (1, 1, 0), (1, 2, 0), (2, 2, 0)]

```
ElrnCycle: [(0, 2), (2, 2), (2, 1), (1, 1), (1, 0), (0, 0)]
[(0, 0, 0), (0, 1, 1), (0, 2, 0), (1, 1, 0), (1, 2, 1), (2, 2, 0)]
          Vertices : [0, 1, 2]
          Edges: [(0, 0, 0), (0, 1, 1), (0, 2, 0), (1, 1, 0), (1, 2, 1), (2, 2, 0)]
          IsElrn: True
          ElrnCycle: [(0, 2), (2, 2), (2, 1), (1, 1), (1, 0), (0, 0)]
[(0, 0, 0), (0, 1, 1), (0, 2, 1), (1, 1, 0), (1, 2, 0), (2, 2, 0)]
          Vertices : [0, 1, 2]
          Edges: [(0, 0, 0), (0, 1, 1), (0, 2, 1), (1, 1, 0), (1, 2, 0), (2, 2, 0)]
          IsElrn: True
          ElrnCycle: [(0, 2), (2, 2), (2, 1), (1, 1), (1, 0), (0, 0)]
[(0, 0, 0), (0, 1, 1), (0, 2, 1), (1, 1, 0), (1, 2, 1), (2, 2, 0)]
          Vertices : [0, 1, 2]
          Edges: [(0, 0, 0), (0, 1, 1), (0, 2, 1), (1, 1, 0), (1, 2, 1), (2, 2, 0)]
          IsElrn: True
          ElrnCycle: [(0, 2), (2, 2), (2, 1), (1, 1), (1, 0), (0, 0)]
[(0, 0, 0), (0, 2, 0), (0, 2, 1), (1, 1, 0), (1, 2, 0), (1, 2, 1)]
          Vertices : [0, 1, 2]
          Edges: [(0, 0, 0), (0, 2, 0), (0, 2, 1), (1, 1, 0), (1, 2, 0), (1, 2, 1)]
          IsElrn: True
          ElrnCycle: [(0, 2), (2, 1), (1, 1), (1, 2), (2, 0), (0, 0)]
[(0, 0, 0), (0, 2, 0), (0, 2, 1), (1, 2, 0), (1, 2, 1), (2, 2, 0)]
          Vertices : [0, 1, 2]
          Edges: [(0, 0, 0), (0, 2, 0), (0, 2, 1), (1, 2, 0), (1, 2, 1), (2, 2, 0)]
          IsElrn: True
          ElrnCycle: [(0, 2), (2, 2), (2, 1), (1, 2), (2, 0), (0, 0)]
[(0, 1, 0), (0, 1, 1), (0, 2, 0), (0, 2, 1), (1, 1, 0), (2, 2, 0)]
          Vertices: [0, 1, 2]
          Edges: [(0, 1, 0), (0, 1, 1), (0, 2, 0), (0, 2, 1), (1, 1, 0), (2, 2, 0)]
          IsElrn: True
          ElrnCycle: [(0, 2), (2, 2), (2, 0), (0, 1), (1, 1), (1, 0)]
```

[(0, 1, 0), (0, 1, 1), (0, 2, 0), (0, 2, 1), (1, 2, 0), (1, 2, 1)]

```
Vertices : [0, 1, 2]
         Edges: [(0, 1, 0), (0, 1, 1), (0, 2, 0), (0, 2, 1), (1, 2, 0), (1, 2, 1)]
         IsElrn: True
         ElrnCycle: [(0, 2), (2, 1), (1, 2), (2, 0), (0, 1), (1, 0)]
[(0, 1, 0), (0, 1, 1), (1, 1, 0), (1, 2, 0), (1, 2, 1), (2, 2, 0)]
         Vertices: [0, 1, 2]
         Edges: [(0, 1, 0), (0, 1, 1), (1, 1, 0), (1, 2, 0), (1, 2, 1), (2, 2, 0)]
         IsElrn: True
         ElrnCycle: [(0, 1), (1, 2), (2, 2), (2, 1), (1, 1), (1, 0)]
[(0, 2, 0), (0, 2, 1), (1, 1, 0), (1, 2, 0), (1, 2, 1), (2, 2, 0)]
         Vertices : [0, 1, 2]
         Edges: [(0, 2, 0), (0, 2, 1), (1, 1, 0), (1, 2, 0), (1, 2, 1), (2, 2, 0)]
         IsElrn: True
         ElrnCycle: [(0, 2), (2, 2), (2, 1), (1, 1), (1, 2), (2, 0)]
============
Groups from 7 edges
[(0, 0, 0), (0, 1, 0), (0, 1, 1), (0, 2, 0), (0, 2, 1), (1, 1, 0), (2, 2, 0)]
         Vertices : [0, 1, 2]
         Edges: [(0, 0, 0), (0, 1, 0), (0, 1, 1), (0, 2, 0), (0, 2, 1), (1, 1, 0), (2, 2, 0)]
         IsElrn: True
         ElrnCycle: [(0, 2), (2, 2), (2, 0), (0, 1), (1, 1), (1, 0), (0, 0)]
[(0, 0, 0), (0, 1, 0), (0, 1, 1), (0, 2, 0), (0, 2, 1), (1, 2, 0), (1, 2, 1)]
         Vertices : [0, 1, 2]
         Edges: [(0, 0, 0), (0, 1, 0), (0, 1, 1), (0, 2, 0), (0, 2, 1), (1, 2, 0), (1, 2, 1)]
         IsElrn: True
         ElrnCycle: [(0, 2), (2, 1), (1, 2), (2, 0), (0, 1), (1, 0), (0, 0)]
[(0, 0, 0), (0, 1, 0), (0, 1, 1), (1, 1, 0), (1, 2, 0), (1, 2, 1), (2, 2, 0)]
         Vertices: [0, 1, 2]
         Edges: [(0, 0, 0), (0, 1, 0), (0, 1, 1), (1, 1, 0), (1, 2, 0), (1, 2, 1), (2, 2, 0)]
         IsElrn: True
```

ElrnCycle: [(0, 1), (1, 2), (2, 2), (2, 1), (1, 1), (1, 0), (0, 0)]

```
[(0, 0, 0), (0, 2, 0), (0, 2, 1), (1, 1, 0), (1, 2, 0), (1, 2, 1), (2, 2, 0)]
         Vertices : [0, 1, 2]
         Edges: [(0, 0, 0), (0, 2, 0), (0, 2, 1), (1, 1, 0), (1, 2, 0), (1, 2, 1), (2, 2, 0)]
         IsElrn: True
         ElrnCycle: [(0, 2), (2, 2), (2, 1), (1, 1), (1, 2), (2, 0), (0, 0)]
[(0, 1, 0), (0, 1, 1), (0, 2, 0), (0, 2, 1), (1, 1, 0), (1, 2, 0), (1, 2, 1)]
         Vertices: [0, 1, 2]
         Edges: [(0, 1, 0), (0, 1, 1), (0, 2, 0), (0, 2, 1), (1, 1, 0), (1, 2, 0), (1, 2, 1)]
         IsElrn: True
         ElrnCycle: [(0, 2), (2, 1), (1, 1), (1, 2), (2, 0), (0, 1), (1, 0)]
[(0, 1, 0), (0, 1, 1), (0, 2, 0), (0, 2, 1), (1, 2, 0), (1, 2, 1), (2, 2, 0)]
         Vertices : [0, 1, 2]
         Edges: [(0, 1, 0), (0, 1, 1), (0, 2, 0), (0, 2, 1), (1, 2, 0), (1, 2, 1), (2, 2, 0)]
         IsElrn: True
         ElrnCycle: [(0, 2), (2, 2), (2, 1), (1, 2), (2, 0), (0, 1), (1, 0)]
_____
Groups from 8 edges
[(0, 0, 0), (0, 1, 0), (0, 1, 1), (0, 2, 0), (0, 2, 1), (1, 1, 0), (1, 2, 0), (1, 2, 1)]
         Vertices : [0, 1, 2]
         Edges: [(0, 0, 0), (0, 1, 0), (0, 1, 1), (0, 2, 0), (0, 2, 1), (1, 1, 0), (1, 2, 0), (1, 2, 1)]
         IsElrn: True
         ElrnCycle: [(0, 2), (2, 1), (1, 1), (1, 2), (2, 0), (0, 1), (1, 0), (0, 0)]
[(0, 0, 0), (0, 1, 0), (0, 1, 1), (0, 2, 0), (0, 2, 1), (1, 2, 0), (1, 2, 1), (2, 2, 0)]
         Vertices : [0, 1, 2]
         Edges: [(0, 0, 0), (0, 1, 0), (0, 1, 1), (0, 2, 0), (0, 2, 1), (1, 2, 0), (1, 2, 1), (2, 2, 0)]
         IsElrn: True
         ElrnCycle: [(0, 2), (2, 2), (2, 1), (1, 2), (2, 0), (0, 1), (1, 0), (0, 0)]
[(0, 1, 0), (0, 1, 1), (0, 2, 0), (0, 2, 1), (1, 1, 0), (1, 2, 0), (1, 2, 1), (2, 2, 0)]
         Vertices: [0, 1, 2]
         Edges: [(0, 1, 0), (0, 1, 1), (0, 2, 0), (0, 2, 1), (1, 1, 0), (1, 2, 0), (1, 2, 1), (2, 2, 0)]
         IsElrn: True
```

ElrnCycle: [(0, 2), (2, 2), (2, 1), (1, 1), (1, 2), (2, 0), (0, 1), (1, 0)]

Total eulerian SbGraph = 110















