```
5 7
0 1 0
1 2 0
2 4 0
4 3 0
3 0 0
4 1 0
3 1 0
```

First call:
path: [0, -1, -1, -1, -1]
Second call:
path: [0, 1, -1, -1, -1]
Third call:
path: [0, 1, 2, -1, -1]
Fourth call:
path: [0, 1, 2, 4, -1]
Fifth call:
path: [0, 1, 2, 4, 3]

Found a hamiltonian cycle:
0 1 2 4 3 0