COMPSCI/SFWRENG 2C03

Data Structures and Algorithms

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Assignment 3

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1.   a. 0: $5 \rightarrow 2 \rightarrow 6$
        1: $4 \rightarrow 8 \rightarrow 11$
        2: $5 \rightarrow 6 \rightarrow 0 \rightarrow 3$
        3: $10 \rightarrow 6 \rightarrow 2$
        4: $1 \rightarrow 8$
        5: $0 \rightarrow 10 \rightarrow 2$
        6: $2 \rightarrow 3 \rightarrow 0$
        7: $8 \rightarrow 11$
        8: $1 \rightarrow 11 \rightarrow 7 \rightarrow 4$
        9:
        10: $5 \rightarrow 3$
        11: $8 \rightarrow 7 \rightarrow 1$

    b. Adjacency Matrix:

```
0, 0, 1, 0, 0, 1, 1, 0, 0, 0, 0, 0,
0, 0, 0, 0, 1, 0, 0, 0, 1, 0, 0, 1,
1, 0, 0, 1, 0, 1, 1, 0, 0, 0, 0, 0,
0, 0, 1, 0, 0, 0, 1, 0, 0, 0, 1, 0,
0, 1, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0,
1, 0, 1, 0, 0, 0, 0, 0, 0, 0, 1, 0,
1, 0, 1, 1, 0, 0, 0, 0, 0, 0, 0, 0,
0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 1,
0, 1, 0, 0, 1, 0, 0, 1, 0, 0, 0, 1,
0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0,
0, 0, 0, 1, 0, 1, 0, 0, 0, 0, 0, 0,
0, 1, 0, 0, 0, 0, 0, 1, 1, 0, 0, 0,
```