

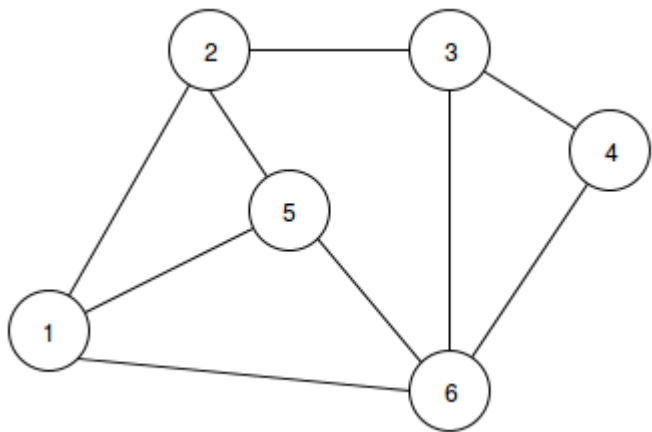
Paieška gilyn nenaudojant rekursijos

Justas Janušauskas

Algoritmas

- $STACK \leftarrow v$
- Aplankome v
- kol $STACK$ ne tusčias:
 - $T \leftarrow STACK.TOP$ (nuskaitome)
 - T kaimynese ieškome neaplankytos viršūnės w
 - Jei radome
 - Aplankome w
 - $STACK \leftarrow w$
 - Jei neradome
 - $STACK.POP$ (išimame)

Gretinumo struktūra



$1 \rightarrow 2 \rightarrow 5 \rightarrow 6 \rightarrow \text{nil}$

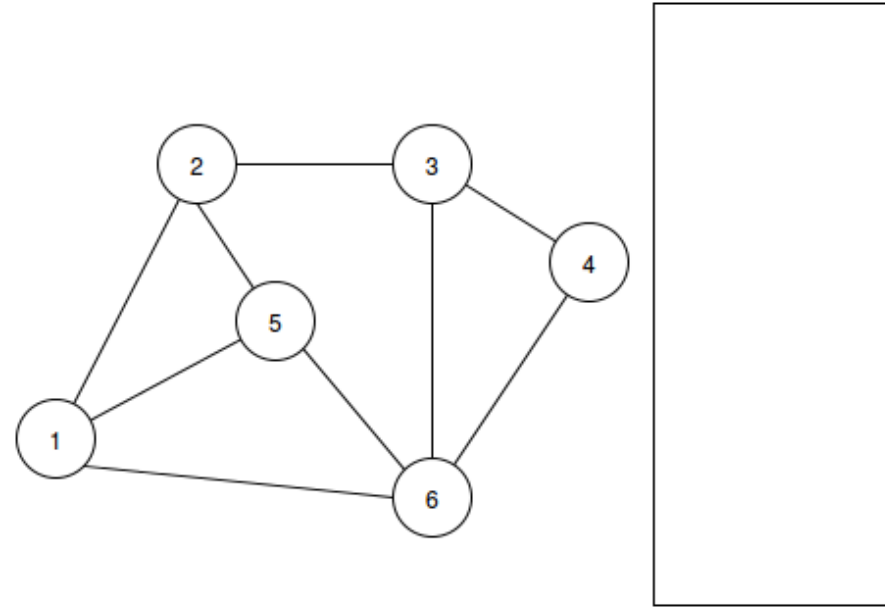
$2 \rightarrow 1 \rightarrow 3 \rightarrow 5 \rightarrow \text{nil}$

$3 \rightarrow 2 \rightarrow 4 \rightarrow 6 \rightarrow \text{nil}$

$4 \rightarrow 3 \rightarrow 6 \rightarrow \text{nil}$

$5 \rightarrow 1 \rightarrow 2 \rightarrow 6 \rightarrow \text{nil}$

$6 \rightarrow 1 \rightarrow 3 \rightarrow 4 \rightarrow 5 \rightarrow \text{nil}$



1 → 2 → 5 → 6 → nil

2 → 1 → 3 → 5 → nil

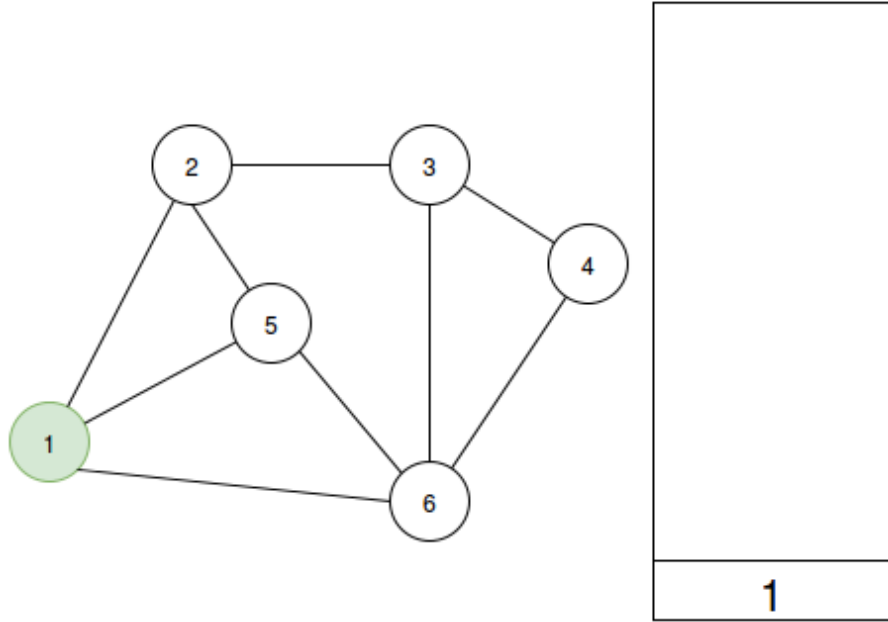
3 → 2 → 4 → 6 → nil

4 → 3 → 6 → nil

5 → 1 → 2 → 6 → nil

6 → 1 → 3 → 4 → 5 → nil

1	2	3	4	5	6
False	False	False	False	False	False



1 → 2 → 5 → 6 → nil

2 → 1 → 3 → 5 → nil

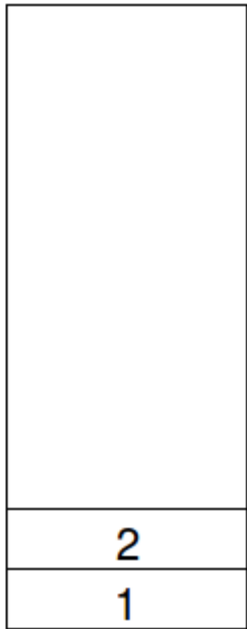
3 → 2 → 4 → 6 → nil

4 → 3 → 6 → nil

5 → 1 → 2 → 6 → nil

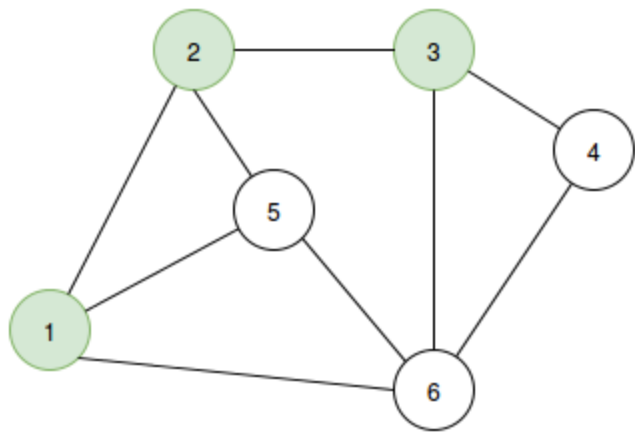
6 → 1 → 3 → 4 → 5 → nil

1	2	3	4	5	6
True	False	False	False	False	False



6 → 1 → 3 → 4 → 5 → nil

1	2	3	4	5	6
True	True	False	False	False	False



3
2
1

1 → 2 → 5 → 6 → nil

2 → 1 → 3 → 5 → nil

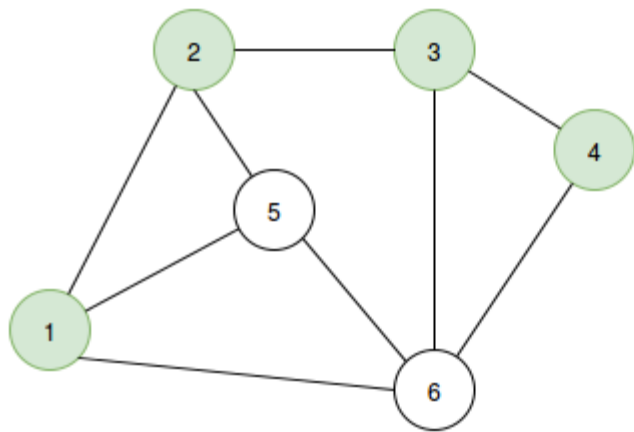
3 → 2 → 4 → 6 → nil

4 → 3 → 6 → nil

5 → 1 → 2 → 6 → nil

6 → 1 → 3 → 4 → 5 → nil

1	2	3	4	5	6
True	True	True	False	False	False



4
3
2
1

1 → 2 → 5 → 6 → nil

2 → 1 → 3 → 5 → nil

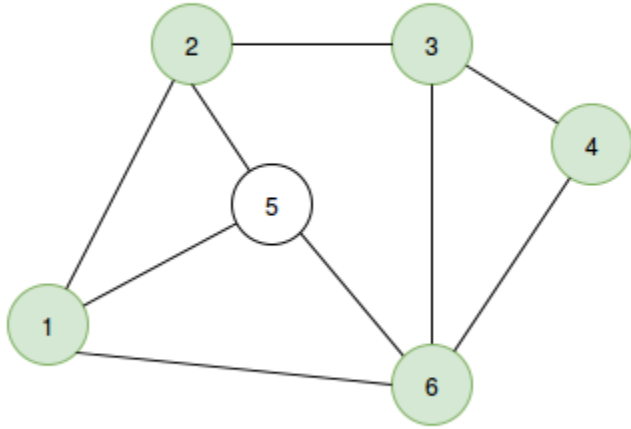
3 → 2 → 4 → 6 → nil

4 → 3 → 6 → nil

5 → 1 → 2 → 6 → nil

6 → 1 → 3 → 4 → 5 → nil

1	2	3	4	5	6
True	True	True	True	False	False



6
4
3
2
1

1 → 2 → 5 → 6 → nil

2 → 1 → 3 → 5 → nil

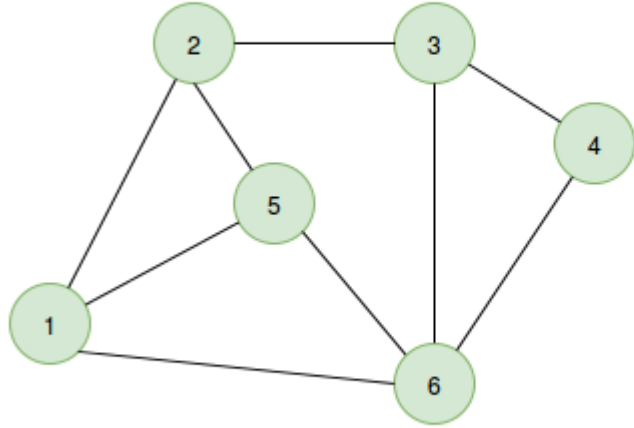
3 → 2 → 4 → 6 → nil

4 → 3 → 6 → nil

5 → 1 → 2 → 6 → nil

6 → 1 → 3 → 4 → 5 → nil

1	2	3	4	5	6
True	True	True	True	False	True



5
6
4
3
2
1

1 → 2 → 5 → 6 → nil

2 → 1 → 3 → 5 → nil

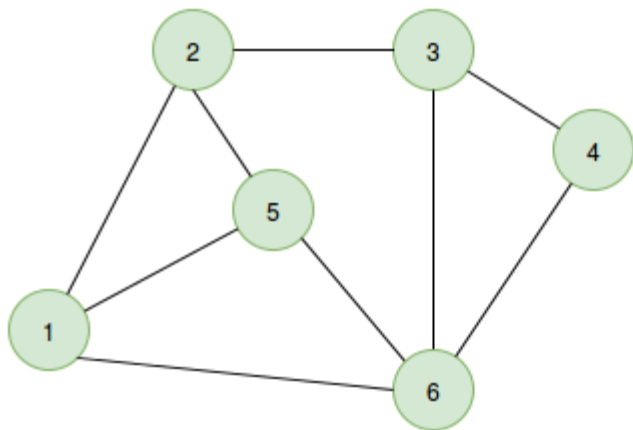
3 → 2 → 4 → 6 → nil

4 → 3 → 6 → nil

5 → 1 → 2 → 6 → nil

6 → 1 → 3 → 4 → 5 → nil

1	2	3	4	5	6
True	True	True	True	True	True



6
4
3
2
1

1 → 2 → 5 → 6 → nil

2 → 1 → 3 → 5 → nil

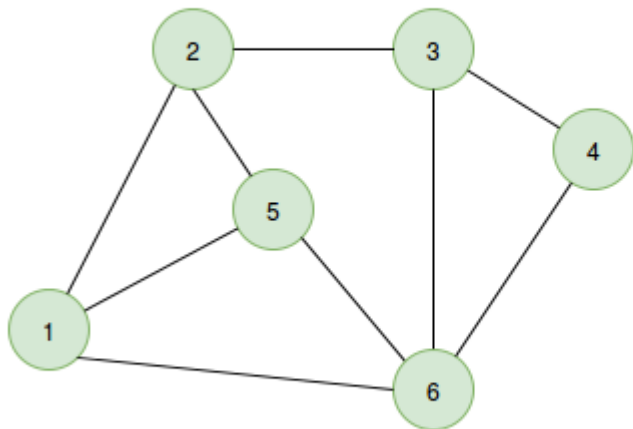
3 → 2 → 4 → 6 → nil

4 → 3 → 6 → nil

5 → 1 → 2 → 6 → nil

6 → 1 → 3 → 4 → 5 → nil

1	2	3	4	5	6
True	True	True	True	True	True



4
3
2
1

1 → 2 → 5 → 6 → nil

2 → 1 → 3 → 5 → nil

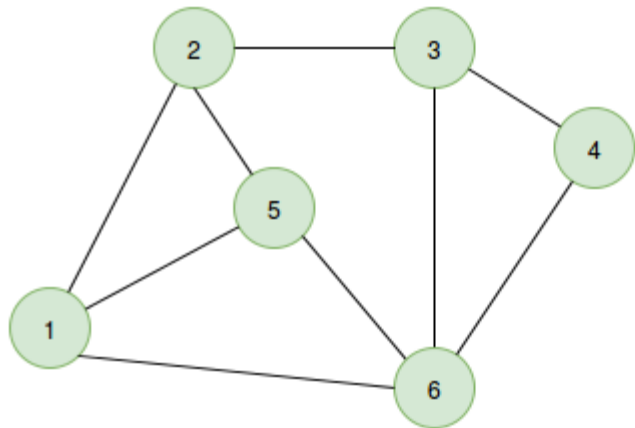
3 → 2 → 4 → 6 → nil

4 → 3 → 6 → nil

5 → 1 → 2 → 6 → nil

6 → 1 → 3 → 4 → 5 → nil

1	2	3	4	5	6
True	True	True	True	True	True



3
2
1

1 → 2 → 5 → 6 → nil

2 → 1 → 3 → 5 → nil

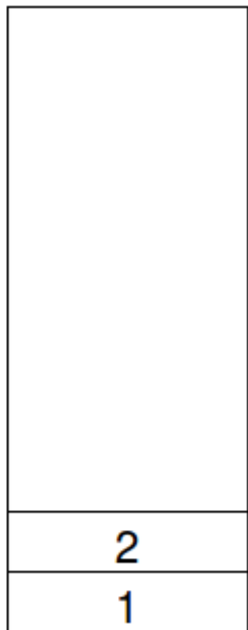
3 → 2 → 4 → 6 → nil

4 → 3 → 6 → nil

5 → 1 → 2 → 6 → nil

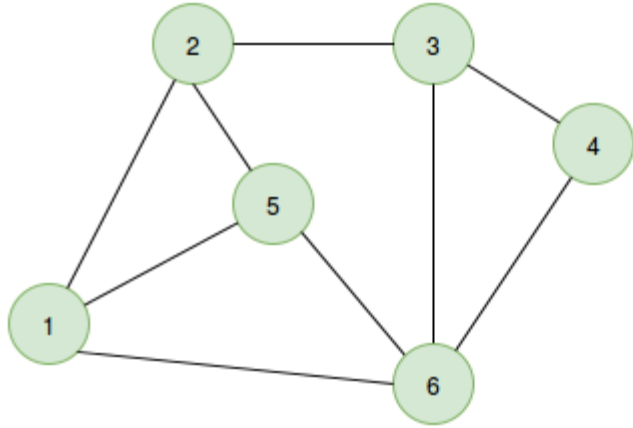
6 → 1 → 3 → 4 → 5 → nil

1	2	3	4	5	6
True	True	True	True	True	True



6 → 1 → 3 → 4 → 5 → nil

1	2	3	4	5	6
True	True	True	True	True	True



1 → 2 → 5 → 6 → nil

2 → 1 → 3 → 5 → nil

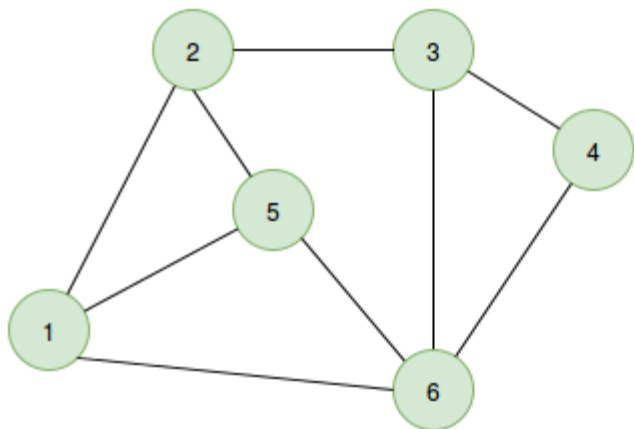
3 → 2 → 4 → 6 → nil

4 → 3 → 6 → nil

5 → 1 → 2 → 6 → nil

6 → 1 → 3 → 4 → 5 → nil

1	2	3	4	5	6
True	True	True	True	True	True



1 → 2 → 5 → 6 → nil

2 → 1 → 3 → 5 → nil

3 → 2 → 4 → 6 → nil

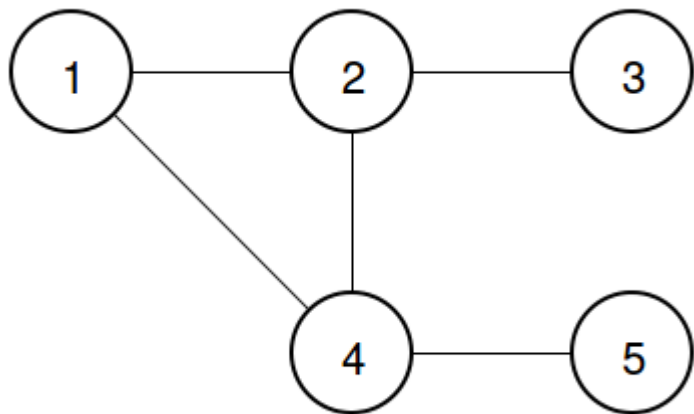
4 → 3 → 6 → nil

5 → 1 → 2 → 6 → nil

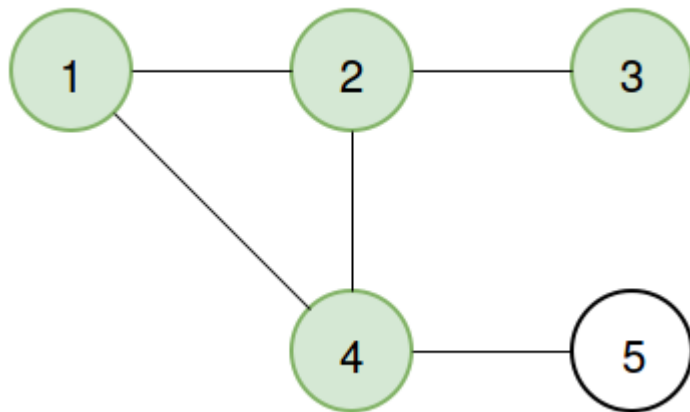
6 → 1 → 3 → 4 → 5 → nil

1	2	3	4	5	6
True	True	True	True	True	True

Uždavinys



Uždavinys



$1 \rightarrow 2 \rightarrow 4 \rightarrow \text{nil}$

$2 \rightarrow 1 \rightarrow 3 \rightarrow 4 \rightarrow \text{nil}$

$3 \rightarrow 2 \rightarrow \text{nil}$

$4 \rightarrow 1 \rightarrow 2 \rightarrow 5 \rightarrow \text{nil}$

$5 \rightarrow 4 \rightarrow \text{nil}$