

Question #3

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Abstract

Consider the "bow-tie" graph in the Broder et al. paper (fig 9):
<http://www9.org/w9cdrom/160/160.html>

Now consider the following graph:

```
A --> B
B --> C
C --> D
C --> A
C --> G
E --> F
G --> C
G --> H
I --> H
I --> J
I --> K
J --> D
L --> D
M --> A
M --> N
N --> D
```

1 Resources

- Graph Structure in the web: <http://www9.org/w9cdrom/160/160.html>
- Stanford, The web graph: <http://nlp.stanford.edu/IR-book/html/htmledition/the-web-graph-1.html>
- Notes from the class:

SCC: Strongly Connected Component - all contained nodes are interconnected

IN: Connects into SCC, but not out from SCC

OUT: Connects out from SCC, but not in to SCC

Tendrils: In or out excluding all SCC

Tube: IN->OUT or OUT->IN connection

Disconnected: Not connected to other sites

2 Results

For the above graph, give the values for:

IN: A, B, C, G

SCC: M

OUT: D, H

Tendrils: L, K, I, J

Tubes: N

Disconnected: E, F