Peer review for Graph problem

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- Overview:

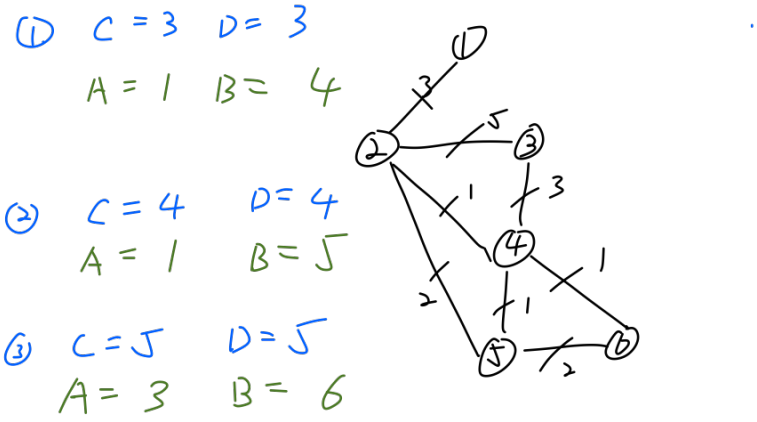
The goal of this graph problem solver is to solve a given graph based on a set of graph predicates that determine what is to be true about the graph.

- Group Assigned Problem: Problem 16

Find s where is_path(s,A,B) and no_nodes(s,t) and total_weights(s,u) and t<C and u>D

In our assigned problem, given a graph, we need to find a path(s) from node A to node B. This path(s) need to have the following constraints; number of nodes t where t is less than a user defined constant C and total edge weight u where u is greater than a user defined constant D.

Test Cases



Results:
Test case 1:

```
%cd /content/drive/My\ Drive/EECS\ 118/GraphFinal
!pwd
!python3 main.py test_in.csv 1 4 3 3
!cat output.csv
```

```
/content/drive/My Drive/EECS 118/GraphFinal
/content/drive/My Drive/EECS 118/GraphFinal
Output was written in the file output.csv
NULL
```

Test case 2:

```
%cd /content/drive/My\ Drive/EECS\ 118/GraphFinal
!pwd
!python3 main.py test_in.csv 1 5 4 4
!cat output.csv
```

```
/content/drive/My Drive/EECS 118/GraphFinal
/content/drive/My Drive/EECS 118/GraphFinal
Output was written in the file output.csv
Path 1
"(1, 2)","(2, 5)"
```

Test case 3:

```
%cd /content/drive/My\ Drive/EECS\ 118/GraphFinal
!pwd
!python3 main.py test_in.csv 3 6 5 5
!cat output.csv
```

```
/content/drive/My Drive/EECS 118/GraphFinal
/content/drive/My Drive/EECS 118/GraphFinal
Output was written in the file output.csv
Path 1
"(3, 2)","(2, 5)","(5, 6)"
Path 2
"(3, 2)","(2, 4)","(4, 6)"
Path 3
"(3, 4)","(4, 5)","(5, 6)"
```

Additional Test Case 4:

```
%cd /content/drive/My\ Drive/EECS\ 118/GraphFinal
!pwd
!python3 main.py test_in.csv 3 6 1 2
!cat output.csv
```

```
/content/drive/My Drive/EECS 118/GraphFinal
/content/drive/My Drive/EECS 118/GraphFinal
Output was written in the file output.csv
NULL
```

Conclusion:

The result matches our expected output and therefore the code and function our peer implement is correct.