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ePAL - Graph Isomorphism

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1 Graph Isomorphism

2 Tree Certificates

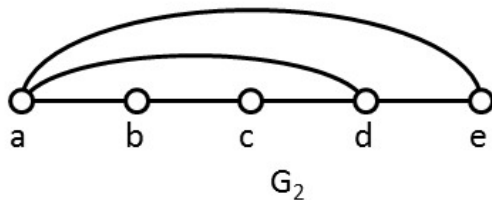
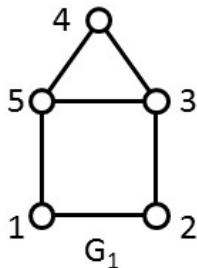
Outline

1 Graph Isomorphism

2 Tree Certificates

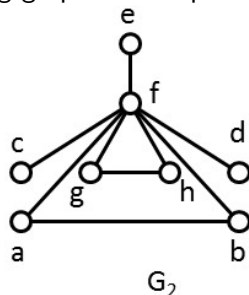
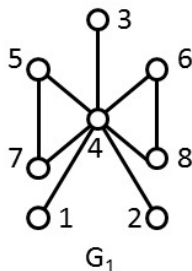
Example 1

Find the function of the two following graphs isomorphism.



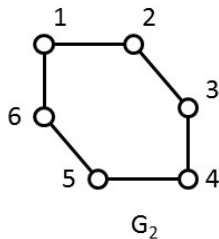
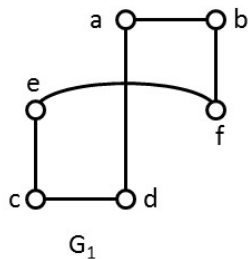
Example 2

Find the function of the two following graphs isomorphism.



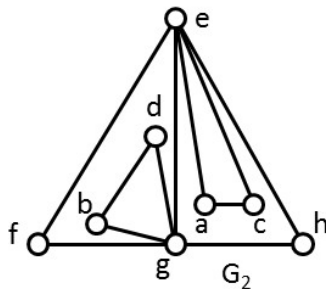
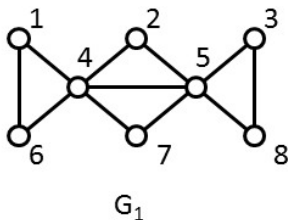
Example 3

Find the function of the two following graphs isomorphism.



Example 4

Find the function of the two following graphs isomorphism.



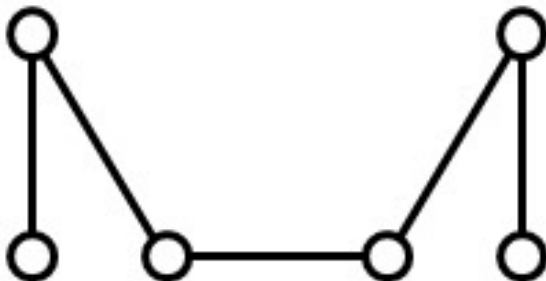
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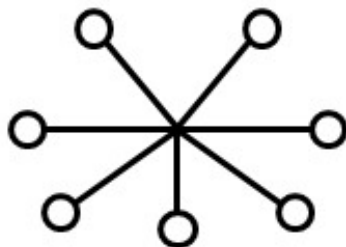
Example 5

Create the certification for the following tree



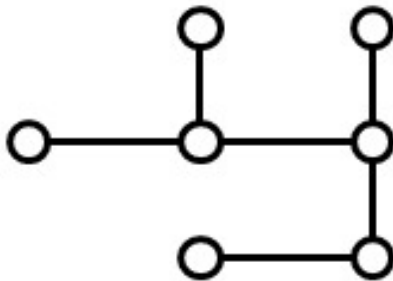
Example 6

Create the certification for the following tree



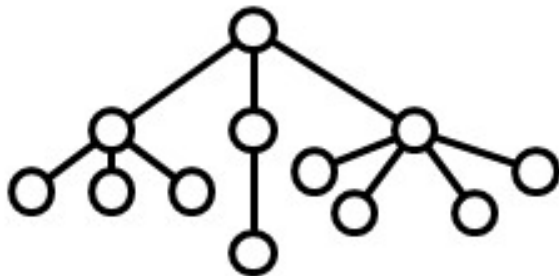
Example 7

Create the certification for the following tree



Example 8

Create the certification for the following tree



Example 9

A tree certificate is given. Explain how we determine the number of the tree leaves although we do not reconstruct the tree.

Example 10

A tree certificate is given. Explain how we determine the maximum node degree of the tree although we do not reconstruct the tree.

Example 11

Reconstruct a tree from its certificate

- 1 0011
- 2 000101100101011
- 3 00010110010110010111
- 4 00001100010111110010001011111

References I



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