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Good. 10/1/18

No. :
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Self-Exercise 9

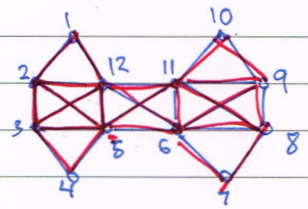
1. a. An Eular path is the graph that containing every edge, the starting and ending points need not be the same, have two odd vertices and some even vertices.

   b. An Eular circuit is the graph that containing every edge, the starting and ending points must be the same, and all vertex has even degree.

   c. Hamilton Path is the graph that contains each vertex exactly once and the starting and the ending not be the same.

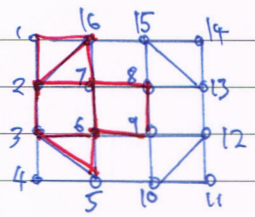
   d. Halmilton circuit is the graph that contains each vertex exactly once and the starting and ending point must be the same.

2. a.



5 → 3 → 12 → 5 → 2 → 12 → 1 → 12 → 3 → 4 → 5 → 11 → 6 → 12
5 ← 6 ← 7 ← 8 ← 9 ← 6 ← 8 ← 11 ← 9 ← 10 ← 11

b.



16 → 1 → 2 → 7 → 8 → 9 → 6 → 7 → 16 → 2 → 3 → 4 → 5 → 6
8 ← 15 ← 14 ← 13 ← 12 ← 10 ← 9 ← 12 ← 11 ← 10 ← 5 ← 3
13 → 15 → 16

3. a. it is not euler circuit because not all vertex is even degree.
   b. it is not euler path because odd vertex for the graph not two.
   c. it is not an euler circuit or an euler path because not all vertex is even degree or odd vertex is equal to two.
   d. it is not an euler circuit or an euler path because not all vertex is even degree or odd vertex is equal to two.

4. graph 1 = B E D C A B
   graph 2 = A B C D E A
   graph 3 = A D C D E A

5. graph 1 it is halmilton path G H D C B F E A
   graph 2 it is halmilton path A B C F E D.
   graph 3 it is halmilton path A B C D E

   If it is hamilton path, give an example.

Graph 4 - Not Hamilton path
Graph 5 - Hamilton path
(ABCDEF)

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6. graph 1 it is not hamilton circuit because when the starting and ending point need to same the vertex will be contains more tan one time.

graph 2 it is not hamilton circuit because when contains all vertex th starting and ending points cannot be the same.

graph 3 it is hamilton circuit ABCEDA.

graph 4 it is not hamilton circuit when contains all vertex the vertex will be visit more than one time.

graph 5 it is hamilton circuit. ABCDEFA.