CSC 226 lab 3

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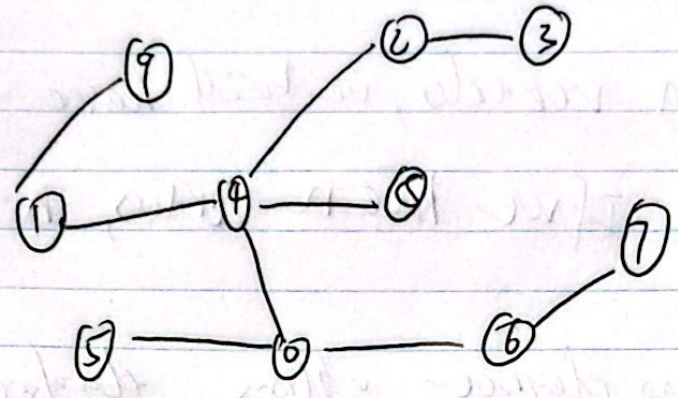

1st loop (0,5) (1,9) (2,5) (4,8) (6,7)

2nd (0,5,6,7) (1,9,4,8) (2,5)

3rd (0,5,6,7) (1,2,5,4,8,9)

4th, all vertices has been checked.

2. Assume we have 2 or more path, when we connect two components, we don't choose the lighest one. Thus it is not a minimum spanning Tree. The Minimum Spanning Tree has to choose the light path to connect all vertices. In Boruvka's algorithm, we will always get a minimum spanning Tree. Hence the result.

3) If we have n vertices, we will have n-1 >/
options of degree. If we have n vertices, n-(n-1)=1.
There will be no degree options. Therefore must
be two vertices with same degree (pigeonhole)