

**CSE 1224 - Lab 8 - Due Tuesday, November 8 by 11:59 pm**

A **regular graph** is one in which the degree of every node is the same.

1) Write a function called *is\_regular\_d(di)* that takes a dictionary representation of a graph as an argument and returns True if the dictionary represents a regular graph, False otherwise.

For the following graph the function should return True:

```
{0 : [1, 2],  
 1 : [2, 3],  
 2 : [0, 3]  
 3 : [0, 1]}
```

2) Write a function called *is\_regular\_m(mat)* that takes a matrix representation of a graph as an argument and returns True if the matrix represents a regular graph, False otherwise.

For the following graph the function should return True:

```
[[0, 1, 1, 0],  
 [0, 0, 1, 1],  
 [1, 0, 0, 1],  
 [1, 1, 0, 0]]
```