

Assignment # 1

October 4, 2017

1 Question (1)

Mention the mistakes in the following code and modify it (lab code)

```
In [ ]: function checkDirectedOut(Mat)
        n = size(Mat,1)
        numArcs = sum(Mat)
        if numArcs == n-1
            for i =1:n
                if sum(Mat[:,i] ) >1
                    return false
                else
                    return true
                end
            end
        else
            return false
        end
    end
```

2 Question (2)

```
In [ ]: function isConnectedHops(numberOfHops,node1,node2,predArray)
```

```
    #Write some code here to find if node1 and node2 are connected through
    #the specified number of hops (numberOfHops) using the predecessor array (predArray)
```

```
    #Output: true or false
```

```
end
```

```
In [ ]: Example 1:
```

```
    predArray = [0,1,5,2,4]
    node1 = 2
    node2 = 5
    numberOfHops = 2
    Output = true
```

Example 2:

```
predArray = [0,1,5,2,4]
node1 = 1
node2 = 3
numberOfHops = 3
Output = false
```

3 Submission Instructions:

1. Submission deadline 12 October 2017 at 11:59 pm.
2. Send your assignment to cicourse2014@gmail.com.
3. The subject of your email should be "ID_Assignment#1".
4. Send your assignment file as ".jl" file (no zipped folders or notebooks) and name the file with "ID_Assignment#1.jl"