CLASS Vertice

value <- value

connectedTo <- []

CLASS Graph

listOfNodes <- []

INSERTEDGE (firstVertice, secondVertice)

‘’’takes input of two integers. Returns false or connects input. ‘’’

NodeOne <- None (1)

NodeTwo <- None (1)

//check nodes being connected are in the graph

For I = 1 to listOfNodes (n)

If firstVertice = listOfNodes[i].value (n)

NodeOne <-listOfNodes[i] (n)

if secondVertice = listOfNodes[i].value (n)

NodeTwo <- listOfNodes[i] (n)

//if input node not in graph.

if NodeOne = None nd NodeTwo = None (1)

return False (1)

else (1)

firstVertice.connectedT1o append secondVertice (1)

secondVertice.connectedTo append firstVertice (1)

INSERTNODE (value)

‘’’takes input of an integer and creates a vertice.’’’

listOfNodes append new Vertice(value) (1)

g <- new Graph

g.insertnode(5)

g.insertnode(6)

g.insertnode(8)

g.insertedge([6,8])

runtime: 5n + 8

Big O: O(n)