# LAB REPORT : COMPSCI 2XB3 LAB SECTION – L02

## **Teaching Assistant -** Seyed Parsa Tayefeh Morsal

## Submitted By -

#### **GROUP NUMBER: 2**

Name : Adhya Goel

Student Number: 400280182

McMaster email: goela10@mcmaster.ca

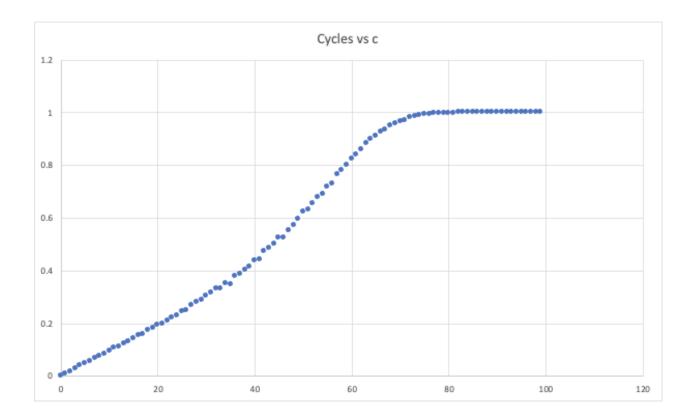
Name : Mridul Arora (Contact Member)

Student Number: 400253526

McMaster email: aroram15@mcmaster.ca

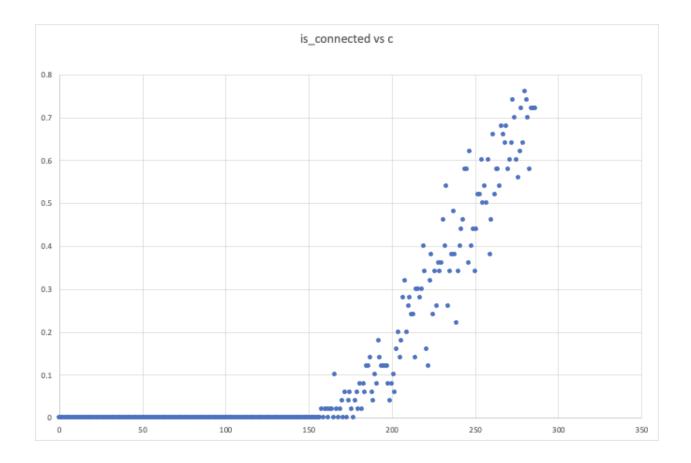
### **Has\_cycle Probability**

The following graph shows the portion of graphs which have a cycle vs c and approximate value of c for which half of the graphs have cycle is 44.



#### **Is connected Probability**

The following graph shows the portion of graphs which are connected vs c and approximate value of c for which half of the graphs are connected is 252.



So, value of c for has\_cycle is less than is\_connected is because it's not necessary if a graph is connected then it must have to be cyclic as well. And, it is easier to make cyclic graph with randomly generated points as compared to a connected graph.