

**Que 1:**

**This is made on an undirected graph.**

**(b) Visualize the network.**

Network has too many dense portions.

(1) Like we can say that 2 web pages of a particular field are connected with each other too much or we can say the pages are liked or referred by peoples too much that's why they are dense, And we can say that the pages are of only one specialised field of area. Like we can compare it with instagram where an account with too many followers is having dense property and less followed accounts have less edges or less dense.

(2) Also two most followed accounts or two different accounts having less edges because it is not necessary that two most followed accounts on instagram followed each other.

(3) Blue color is node and yellow color is edges.

(4) Like in the data set one mcdonalds is most liked so it is connected mostly and having more edges.

**Graph:**

**Layout:**

**Tools way of use:**

1.import the network in the tools

2.then I changed the styling of the network .

3.And assign source and destination nodes when data is loaded in the tool and then decide the weighted or non weighted as per dataset used.

4.Also made the directed edges for the directed graph

**Analysis**

Following layouts are used:

(a)circular layout:

Here all nodes are put into the circle and edges are drawn between the nodes if they exist so we get to know what is the degree distribution, also which has a more dense degree.

(b)Grid layout:

Here we gotta know where a large number of nodes are present in the graph. So from here we got to know about the node density of the graph.

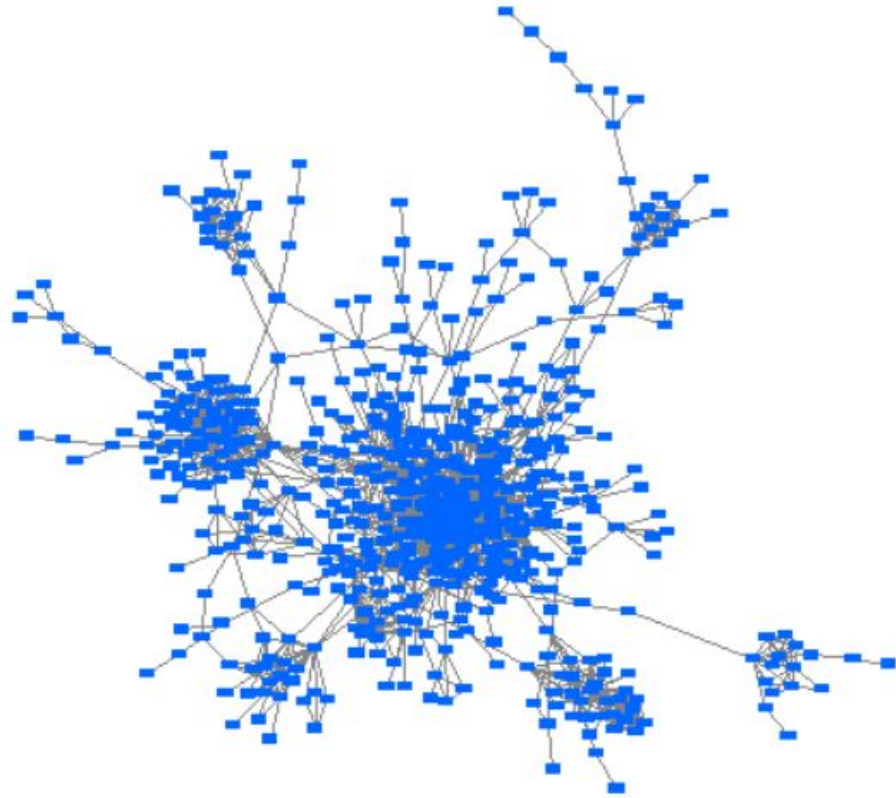
(c )Degree sorted:

The circle has a dense blue color that means its degrees are very large, we can say it is having high degree nodes with a more colored border in the layout.

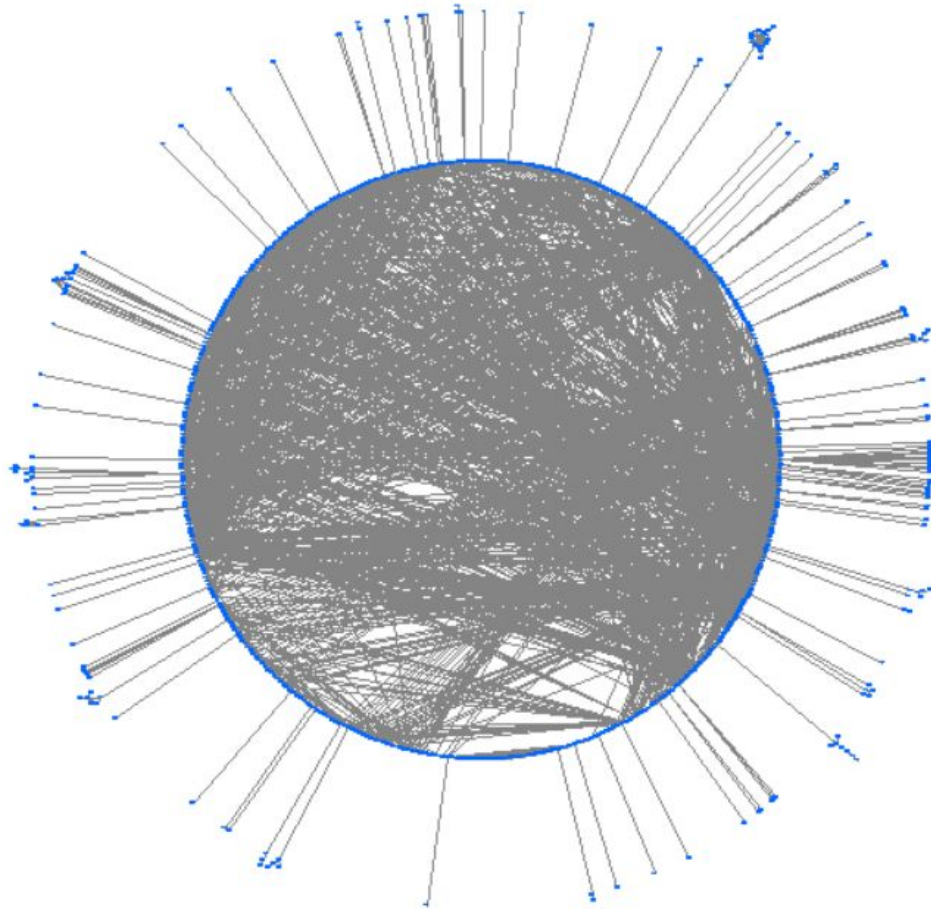
(d) Default layout:

but the que1 graph is completely connected. No patches are visible.

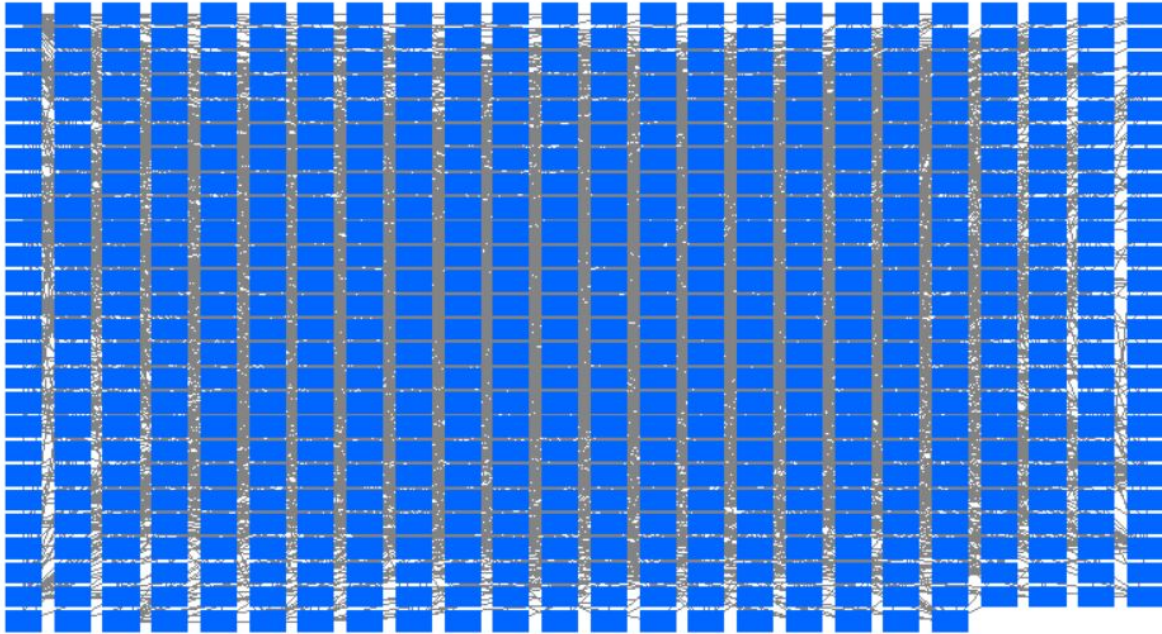
Default layout:



Circular view:



Grid layout:



Degree sorted layout:

