## D3js v4 - Graph Visualization

### Project 2 by Abrar Jahin

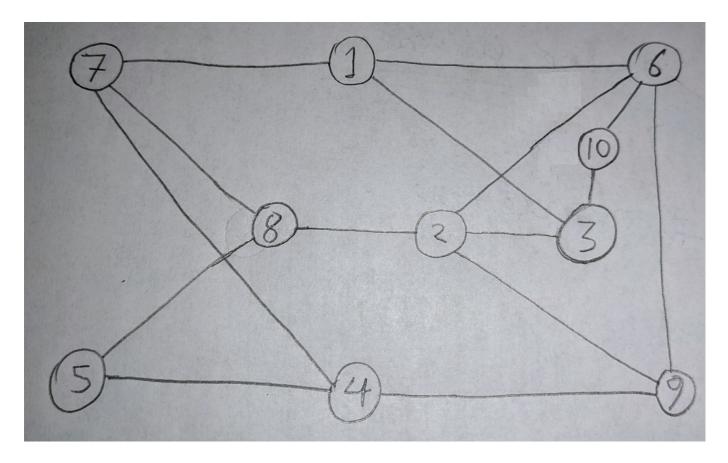
All work tasklist can be found in here and code can be found in here.

The adjacency matrix is looking like this-

|    | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|----|---|---|---|---|---|---|---|---|---|----|
| 1  | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0  |
| 2  | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0  |
| 3  | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1  |
| 4  | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0  |
| 5  | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0  |
| 6  | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1  |
| 7  | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0  |
| 8  | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0  |
| 9  | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0  |
| 10 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0  |

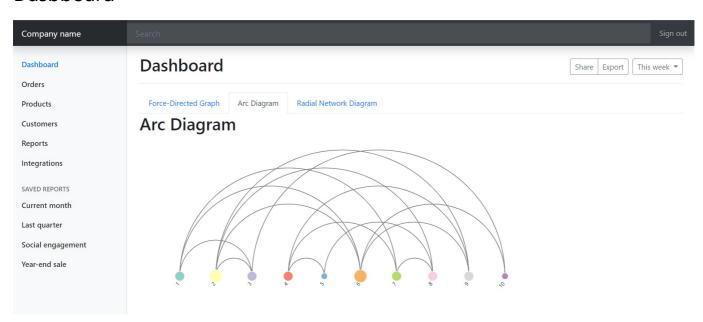
### Manual Drawing

Hand drawn graph from the adjacency matrix is like this-



The dashboard is looking like this-

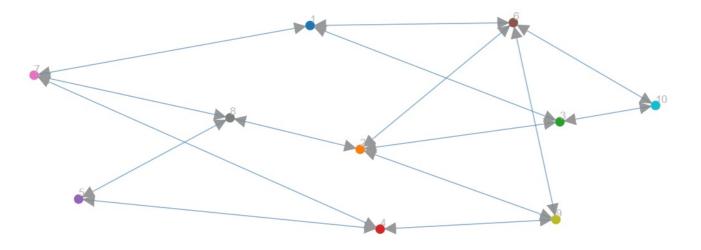
#### Dasbboard



where different components can be switched from tab and every component is interactable. The 3 components are-

#### 1. Force Directed Graph

I am doing it as a directed graph with a direction from source to destination.



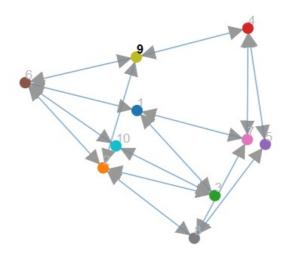
And the graph is self adjustable and interactable. The node names are also hoverable like this-

Force-Directed Graph

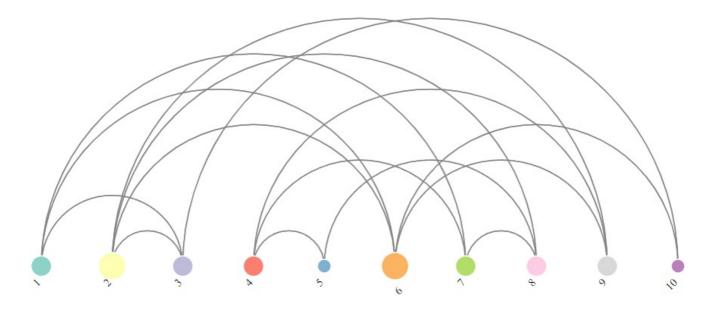
Arc Diagram

Radial Network Diagram

# Force-Directed Graph



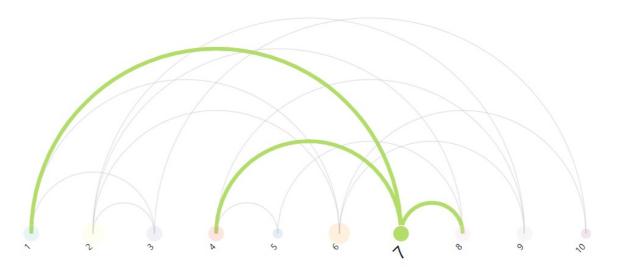
#### 2. Arc Diagram Graph



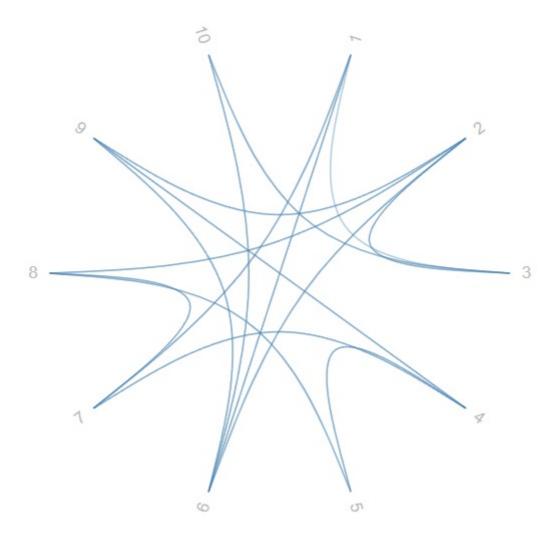
The arcs are hoverable and interactable like this-



# **Arc Diagram**



### 3. Radial Network Diagram Gaph



And after hovering any item, the graph is looking like this-

Force-Directed Graph Arc Diagram

Radial Network Diagram

# Radial Network Diagram

