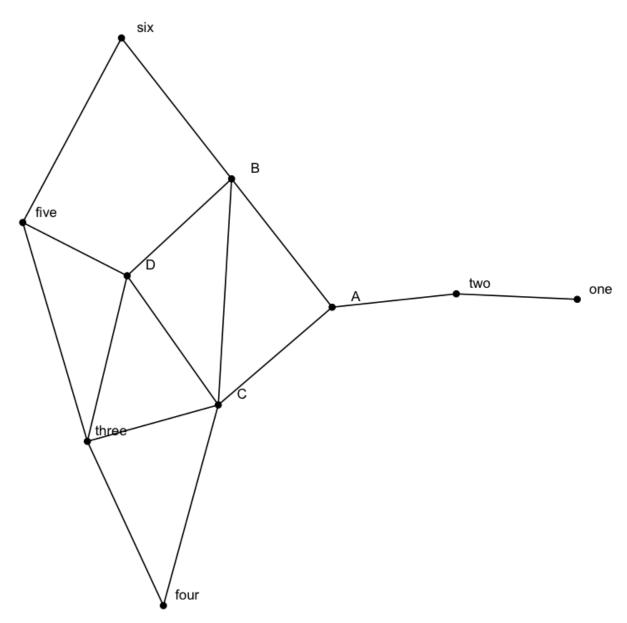
Exe. 2

Code

```
nodes <- read_csv("nodes.csv")
edges <- read_csv("edges.csv")
ig <- igraph::graph_from_data_frame(edges, vertices = nodes) %>% as_tbl_graph()
net <- ggraph(ig, layout = "stress") + geom_node_point(size = 2) + geom_node_text(aes(label = name), nushow(net)</pre>
```



B, C, and D have the highest degree centrality. A has the highest betweenness centrality.

degree <- degree(ig)
degree</pre>

four five Α В C D one two three six 2 3 5 4 1 2 4 2 3

closeness <- closeness(ig)</pre>

closeness

A B C D one two three four 0.07692308 0.11111111 0.12500000 0.16666667 0.03333333 0.04761905 0.25000000 NaN five six 1.00000000 NaN

betweenness <- betweenness(ig)</pre>

betweenness

four five В C two three six D one 14.0 0.0 3.0 3.0 5.5 11.0 4.5 8.0 0.0 0.0