Project 2

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```
print("Data structure:")
```

```
## [1] "Data structure:"
```

```
str(D)
```

```
## 'data.frame':    13288 obs. of  1 variable:
##  $ X0.4...weight...0.002105263157894737.: chr  "0 12 {'weight': 0.002105263157894737}" "0 18 {'weigh
```

```
print("First few rows:")
```

```
## [1] "First few rows:"
```

```
head(D)
```

```
##   X0.4...weight...0.002105263157894737.
## 1 0 12 {'weight': 0.002105263157894737}
## 2 0 18 {'weight': 0.002105263157894737}
## 3 0 25 {'weight': 0.004210526315789474}
## 4 0 30 {'weight': 0.002105263157894737}
## 5  0 46 {'weight': 0.006315789473684211}
## 6 0 55 {'weight': 0.002105263157894737}
```

```
# Load the library
library(igraph)
```

```
##
## Attaching package: 'igraph'
```

```
## The following objects are masked from 'package:stats':
##
##     decompose, spectrum
```

```
## The following object is masked from 'package:base':
##
##     union
```

```
library(stringr)
```

```
# Format the data
edges_df <- data.frame(
  from = as.numeric(sub("^(\\d+).*", "\\1", D$X0.4...weight...0.002105263157894737.)),
  to = as.numeric(sub("^\\d+\\s+(\\d+).*", "\\1", D$X0.4...weight...0.002105263157894737.)),
  weight = as.numeric(sub(".*'weight':\\s*([0-9.]+).*", "\\1", D$X0.4...weight...0.002105263157894737.))
)

# Create the graph
```

```r
g <- graph_from_data_frame(edges_df, directed = TRUE)
plot(g)
```