title: “LAB 16”

author: “JESSICA PAOLA AGUILAR SERVIN”

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output: html_document

LABORATORIO - Analisis de Redes en R - Indicadores básicos Globales

```
library(EconGeo)
```

```
##
## Please cite EconGeo in publications as:
```

```
##  Balland, P.A. (2017) Economic Geography in R: Introduction to the EconGeo Package, Papers in Evolutionary Eco
nomic Geography, 17 (09): 1-75
```

Cargar DATA

```
EL= read.csv("https://raw.githubusercontent.com/PABalland/ON/master/lesmis-el.csv")
```

Ver encabezado

```
head (EL)
```

```
##     Character1  Character2 Weight
## 1 Gillenormand JeanValjean      2
## 2      Zephine   Listolier      3
## 3         Joly     Feuilly      5
## 4       Brevet       Judge      2
## 5   Bamatabois JeanValjean      2
## 6     Gavroche JeanValjean      1
```

Transformar a matriz

```
MM <- get.matrix(EL)
```

Ver matriz simetrica (red no dirigida- red bidireccional) Diferencias entre red dirigida y no dirigida Esta es una red no dirigida porque la matriz de adyaciencias es simetrica

Elaboramos grafica

```
library(igraph)
```

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

```
## The following object is masked from 'package:EconGeo':
##
##     diversity
```

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

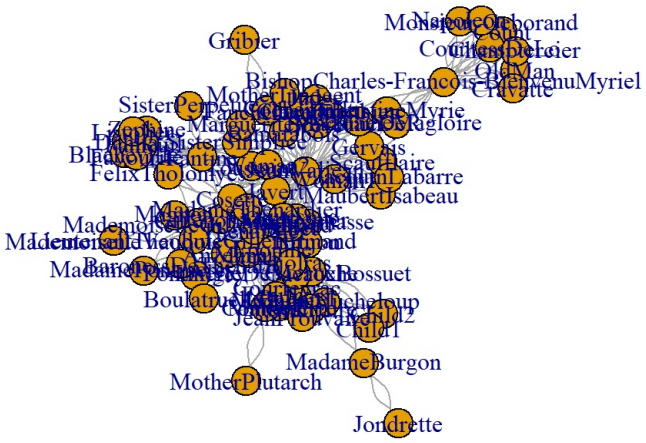
```
## The following object is masked from 'package:base':
##
##     union
```

```
g <- graph_from_data_frame(d=EL, directed = FALSE)
g
```

```
## IGRAPH 67f3be7 UN-- 77 508 --
## + attr: name (v/c), Weight (e/n)
## + edges from 67f3be7 (vertex names):
##  [1] Gillenormand   --JeanValjean
##  [2] Zephine        --Listolier
##  [3] Joly           --Feuilly
##  [4] Brevet         --Judge
##  [5] Bamatabois     --JeanValjean
##  [6] Gavroche       --JeanValjean
##  [7] MadameHucheloup--Courfeyrac
##  [8] Gavroche       --Javert
## + ... omitted several edges
```

Visualizar objeto grafico

```
plot(g)
```



Elimina los pesos

```
EL$Weight = NULL
```

Visualizar resultados

```
head(EL)
```

```
##     Character1  Character2
## 1 Gillenormand JeanValjean
## 2      Zephine   Listolier
## 3         Joly     Feuilly
## 4       Brevet       Judge
## 5   Bamatabois JeanValjean
## 6     Gavroche JeanValjean
```

LLAMAR LIBRERIA

```
library(networkD3)
```

Generar gáfico con netword3

```
simpleNetwork(EL)
```


MotherPlutarch
Fauchelevent
Gribier