

DATA 607 Homework 2 - Prevalence of Tuberculosis Worldwide (1995 to 2013)

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February 13, 2016

```
## Warning: package 'RMySQL' was built under R version 3.2.3
```

```
## Loading required package: DBI
```

```
## [1] "tb"
```

```
## [1] "country" "year"      "sex"      "child"    "adult"    "elderly"
```

```
## [1] TRUE
```

```
## [1] TRUE
```

```
## [1] "C:/Users/Antonio/Downloads"
```

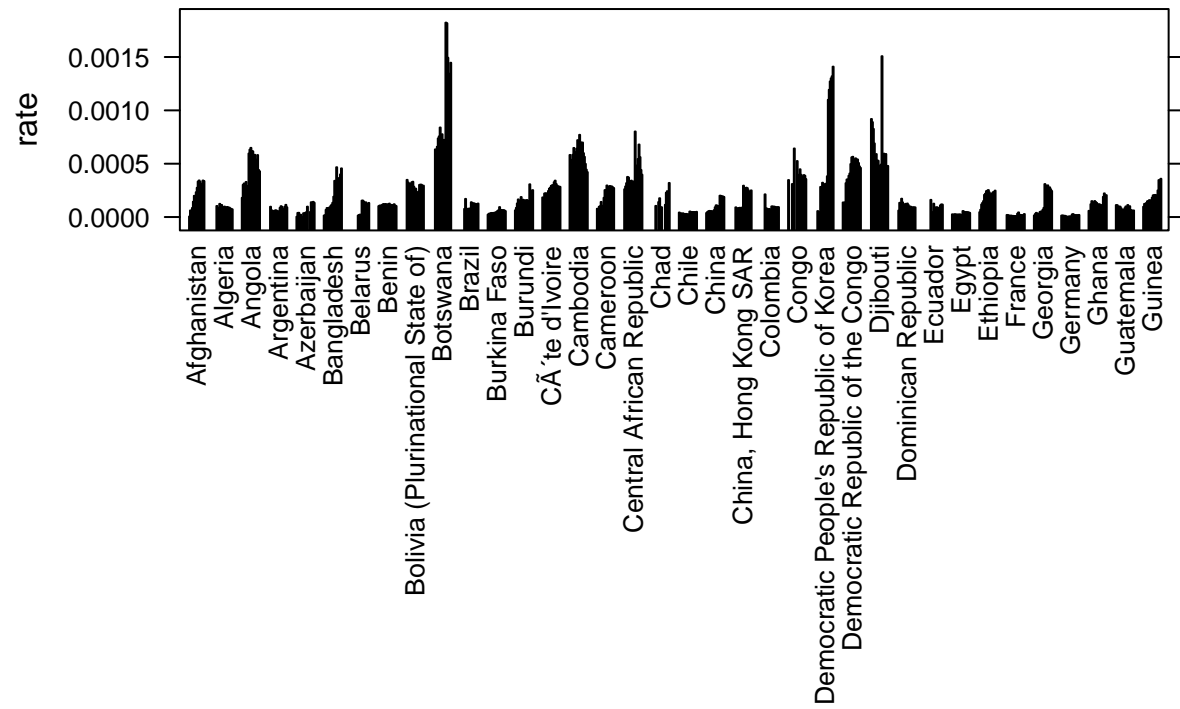
```
## [1] TRUE
```

```
## [1] 1691
```

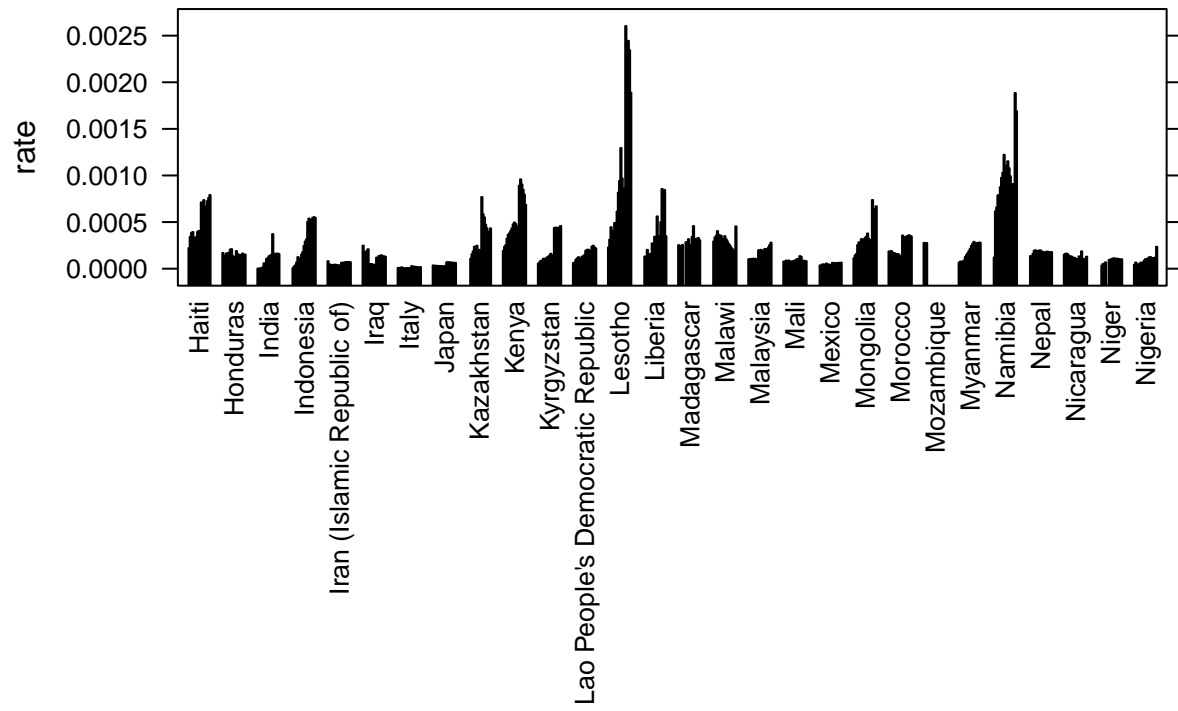
```
get the summary statistics for combined TB-World Population dataframe
```

```
##      country      year      cases      population
## Length:1691      Min.   :1995      Min.    :      0      Min.   :6.759e+05
## Class :character  1st Qu.:2000      1st Qu.:  1050      1st Qu.:8.842e+06
## Mode  :character  Median :2005      Median :   2483      Median :2.014e+07
##                      Mean   :2004      Mean   :   9236      Mean   :6.387e+07
##                      3rd Qu.:2009      3rd Qu.:   6350      3rd Qu.:4.868e+07
##                      Max.   :2013      Max.   :430522      Max.   :1.386e+09
##      rate
## Min.   :0.000e+00
## 1st Qu.:6.558e-05
## Median :1.361e-04
## Mean   :2.461e-04
## 3rd Qu.:2.851e-04
## Max.   :4.037e-03
```

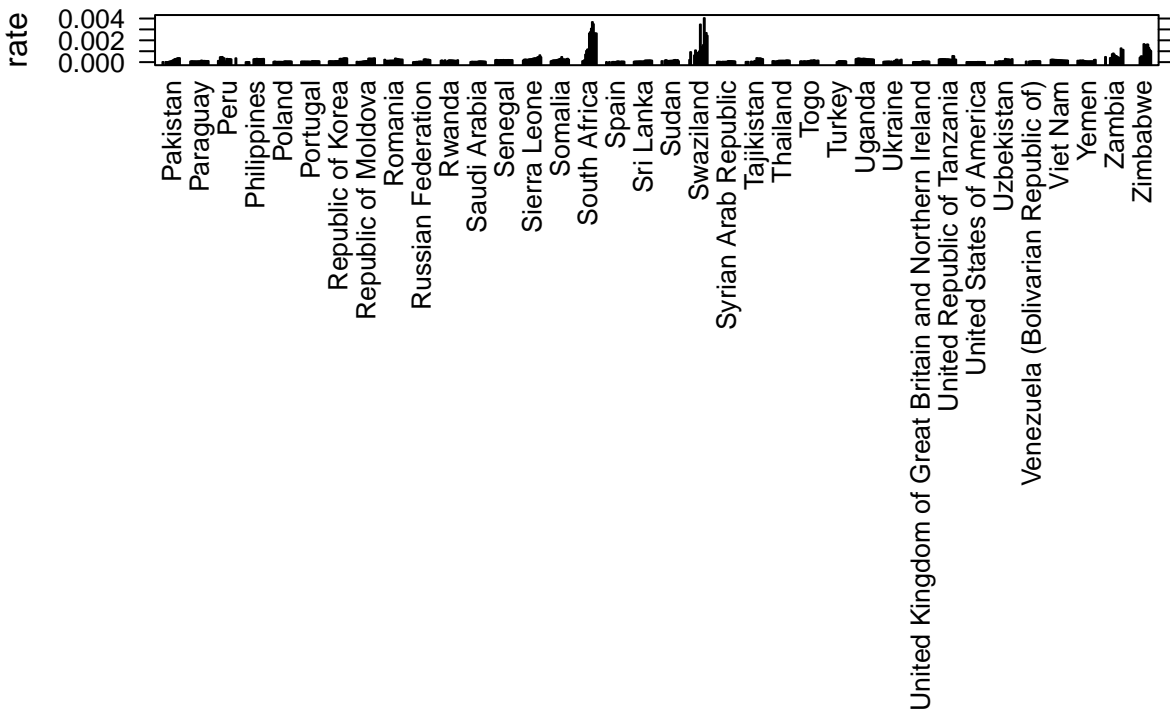
Turberculosis Rates by Country from 1995 to 2013 (Countries A to G)



Turberculosis Rates by Country from 1995 to 2013 (Countries H to N)



Turberculosis Rates by Country from 1995 to 2013 (Countries O to N)



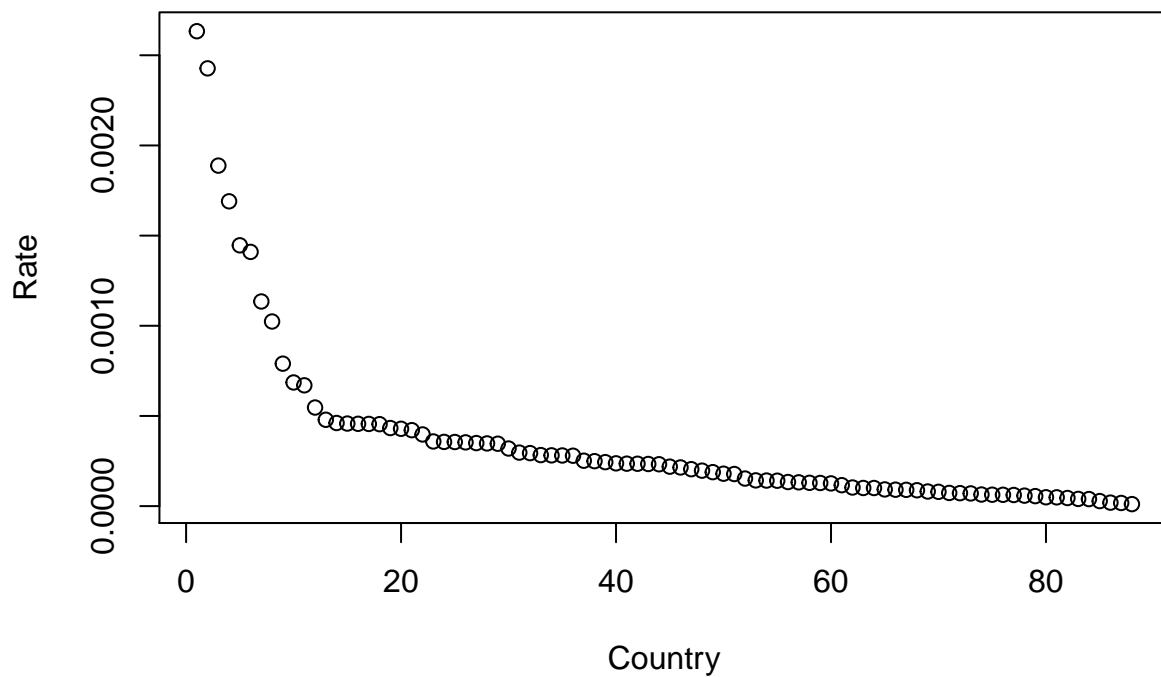
show ranking and scatterplot of country vs TB rate for 2013

```
## [1] "South Africa"
## [2] "Swaziland"
## [3] "Lesotho"
## [4] "Namibia"
## [5] "Botswana"
## [6] "Democratic People's Republic of Korea"
## [7] "Zambia"
## [8] "Zimbabwe"
## [9] "Haiti"
## [10] "Kenya"
## [11] "Mongolia"
## [12] "Indonesia"
## [13] "Djibouti"
## [14] "Democratic Republic of the Congo"
## [15] "Kyrgyzstan"
## [16] "Sierra Leone"
## [17] "Bangladesh"
## [18] "Malawi"
## [19] "Kazakhstan"
## [20] "Angola"
## [21] "Cambodia"
## [22] "Central African Republic"
## [23] "Guinea"
## [24] "Congo"
```

[25] "Republic of Moldova"
[26] "Peru"
[27] "Liberia"
[28] "Republic of Korea"
[29] "Morocco"
[30] "Chad"
[31] "Philippines"
[32] "Bolivia (Plurinational State of)"
[33] "Côte d'Ivoire"
[34] "Tajikistan"
[35] "Uzbekistan"
[36] "Malaysia"
[37] "Burundi"
[38] "China, Hong Kong SAR"
[39] "Georgia"
[40] "Romania"
[41] "Nigeria"
[42] "Uganda"
[43] "Somalia"
[44] "Ukraine"
[45] "Lao People's Democratic Republic"
[46] "Yemen"
[47] "Ghana"
[48] "Russian Federation"
[49] "China"
[50] "Rwanda"
[51] "Nepal"
[52] "Honduras"
[53] "Togo"
[54] "Sri Lanka"
[55] "Viet Nam"
[56] "Azerbaijan"
[57] "Belarus"
[58] "Nicaragua"
[59] "Iraq"
[60] "Brazil"
[61] "Ecuador"
[62] "Benin"
[63] "Niger"
[64] "Paraguay"
[65] "Colombia"
[66] "Argentina"
[67] "Dominican Republic"
[68] "Venezuela (Bolivarian Republic of)"
[69] "Mali"
[70] "Portugal"
[71] "Turkey"
[72] "Algeria"
[73] "Iran (Islamic Republic of)"
[74] "Mexico"
[75] "Syrian Arab Republic"
[76] "Japan"
[77] "Guatemala"
[78] "Poland"

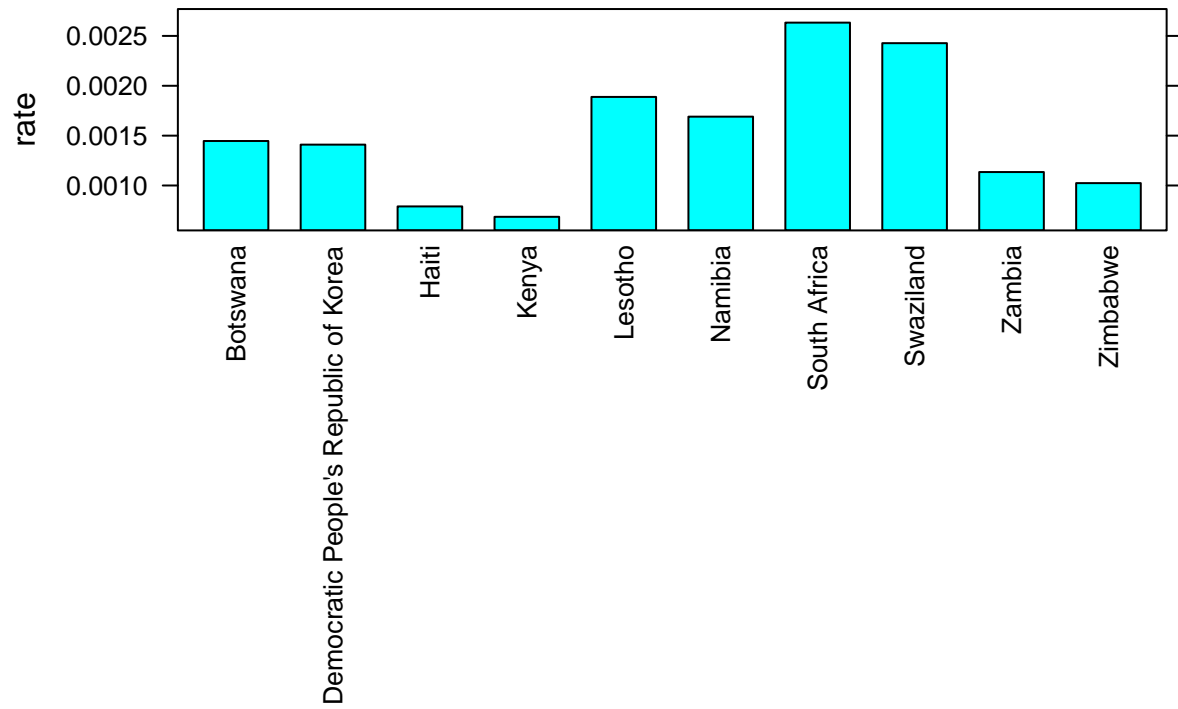
```
## [79] "Burkina Faso"
## [80] "United Kingdom of Great Britain and Northern Ireland"
## [81] "Chile"
## [82] "Spain"
## [83] "Saudi Arabia"
## [84] "Egypt"
## [85] "France"
## [86] "Germany"
## [87] "Italy"
## [88] "United States of America"
```

Turberculosis Rate by Country for 2013



##	country	rate
## 1	South Africa	0.0026333306
## 2	Swaziland	0.0024273438
## 3	Lesotho	0.0018881977
## 4	Namibia	0.0016901726
## 5	Botswana	0.0014462107
## 6	Democratic People's Republic of Korea	0.0014096535
## 7	Zambia	0.0011348379
## 8	Zimbabwe	0.0010237004
## 9	Haiti	0.0007900199
## 10	Kenya	0.0006856927

Countries with the Highest Tuberculosis Rate (2013)



##	country	rate
## 79	Burkina Faso	5.556593e-05
## 80	United Kingdom of Great Britain and Northern Ireland	4.908431e-05
## 81	Chile	4.869547e-05
## 82	Spain	4.500611e-05
## 83	Saudi Arabia	4.002932e-05
## 84	Egypt	3.915601e-05
## 85	France	2.799758e-05
## 86	Germany	1.943751e-05
## 87	Italy	1.756018e-05
## 88	United States of America	1.119823e-05

Countries with the Lowest Tuberculosis Rate (2013)

