Jesuit Schools Data Visualization

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```
library(dplyr)
```

```
##
## Attaching package: 'dplyr'
##
## The following objects are masked from 'package:stats':
##
##     filter, lag
##
## The following objects are masked from 'package:base':
##
##     intersect, setdiff, setequal, union
```

```
library(tidyr)
library(ggplot2)
library(leaflet)
library(networkD3)
```

```
##
## Attaching package: 'networkD3'
##
## The following object is masked from 'package:leaflet':
##
##     JS
```

```
library(rgdal)
```

```
## Loading required package: sp
## rgdal: version: 1.0-4, (SVN revision 548)
##  Geospatial Data Abstraction Library extensions to R successfully loaded
##  Loaded GDAL runtime: GDAL 1.11.2, released 2015/02/10
##  Path to GDAL shared files: /Library/Frameworks/R.framework/Versions/3.2/Resource
s/library/rgdal/gdal
##  Loaded PROJ.4 runtime: Rel. 4.9.1, 04 March 2015, [PJ_VERSION: 491]
##  Path to PROJ.4 shared files: /Library/Frameworks/R.framework/Versions/3.2/Resourc
es/library/rgdal/proj
##  Linking to sp version: 1.1-1
```

```
library(countrycode)
library(choroplethr)
library(choroplethrMaps)
library(maps)
```

```
##
##  # ATTENTION: maps v3.0 has an updated 'world' map.        #
##  # Many country borders and names have changed since 1990. #
##  # Type '?world' or 'news(package="maps")'. See README_v3. #
```

```
library(maptools)
```

```
## Checking rgeos availability: FALSE
##      Note: when rgeos is not available, polygon geometry     computations in mapto
ols depend on gpclib,
##      which has a restricted licence. It is disabled by default;
##      to enable gpclib, type gpclibPermit()
```

```
library(ggmap)
library(ggthemes)
library(htmlwidgets)
```

```
##
## Attaching package: 'htmlwidgets'
##
## The following object is masked from 'package:networkD3':
##
##     JS
```

```
library(tidyr)
library(dplyr)
library(RColorBrewer)
library(readxl)
library(knitr)
library(rcdimple)
```

```
## Loading required package: htmltools
##
## Attaching package: 'rcdimple'
##
## The following object is masked from 'package:ggplot2':
##
##     facet
```

```
library(DT)
```

```
##
## Attaching package: 'DT'
##
## The following object is masked from 'package:networkD3':
##
##     JS
```

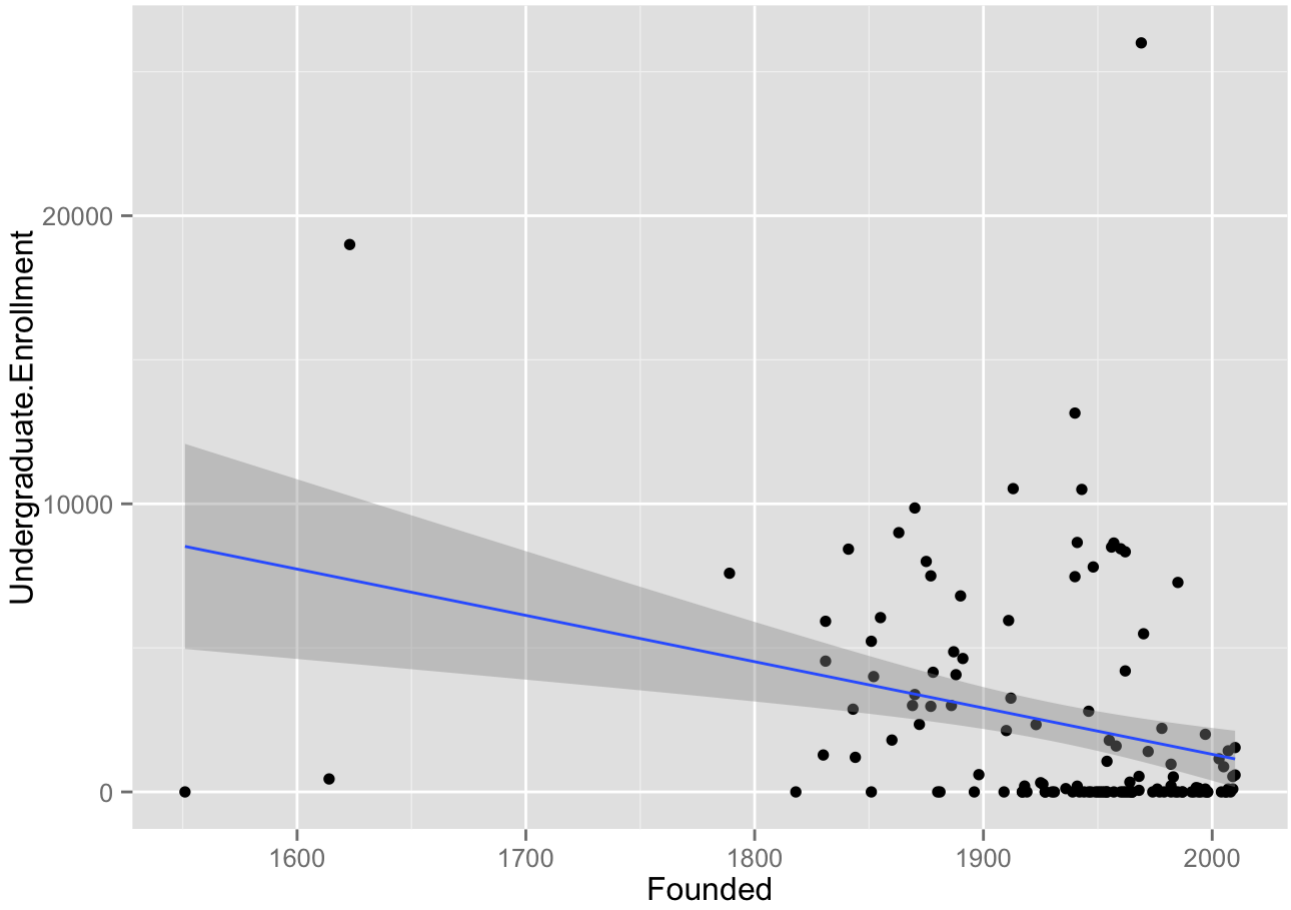
```
library(htmltools)
library(parcoords)
library(googleVis)
```

```
##
## Welcome to googleVis version 0.5.10
##
## Please read the Google API Terms of Use
## before you start using the package:
## https://developers.google.com/terms/
##
## Note, the plot method of googleVis will by default use
## the standard browser to display its output.
##
## See the googleVis package vignettes for more details,
## or visit http://github.com/mages/googleVis.
##
## To suppress this message use:
## suppressPackageStartupMessages(library(googleVis))
```

```
#QUINN'S PART
setwd("~/Desktop/finalproject")
jccdata <- read.csv("jcc.csv",head=TRUE)
```

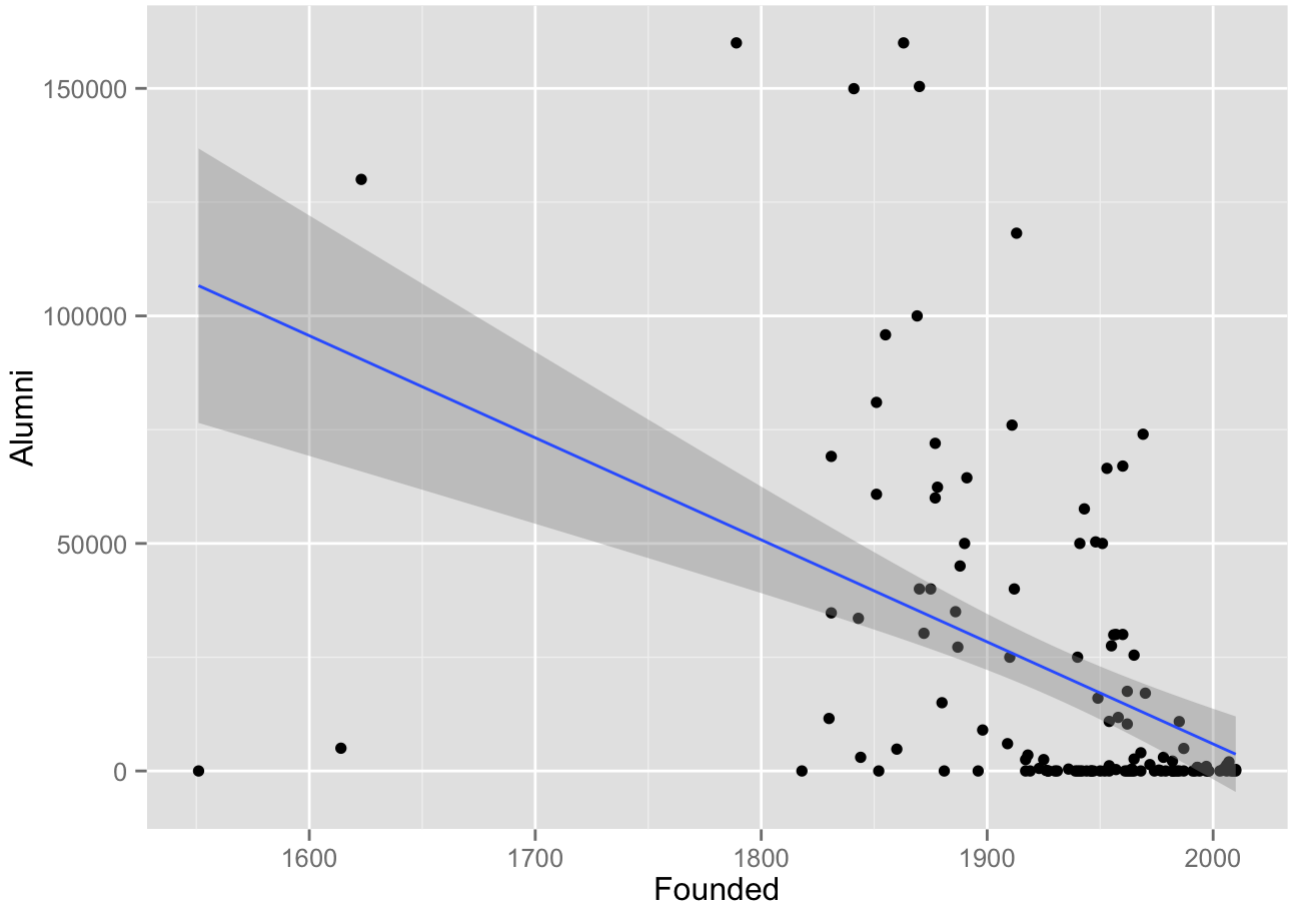
```
## Warning: Removed 55 rows containing missing values (stat_smooth).
```

```
## Warning: Removed 55 rows containing missing values (geom_point).
```

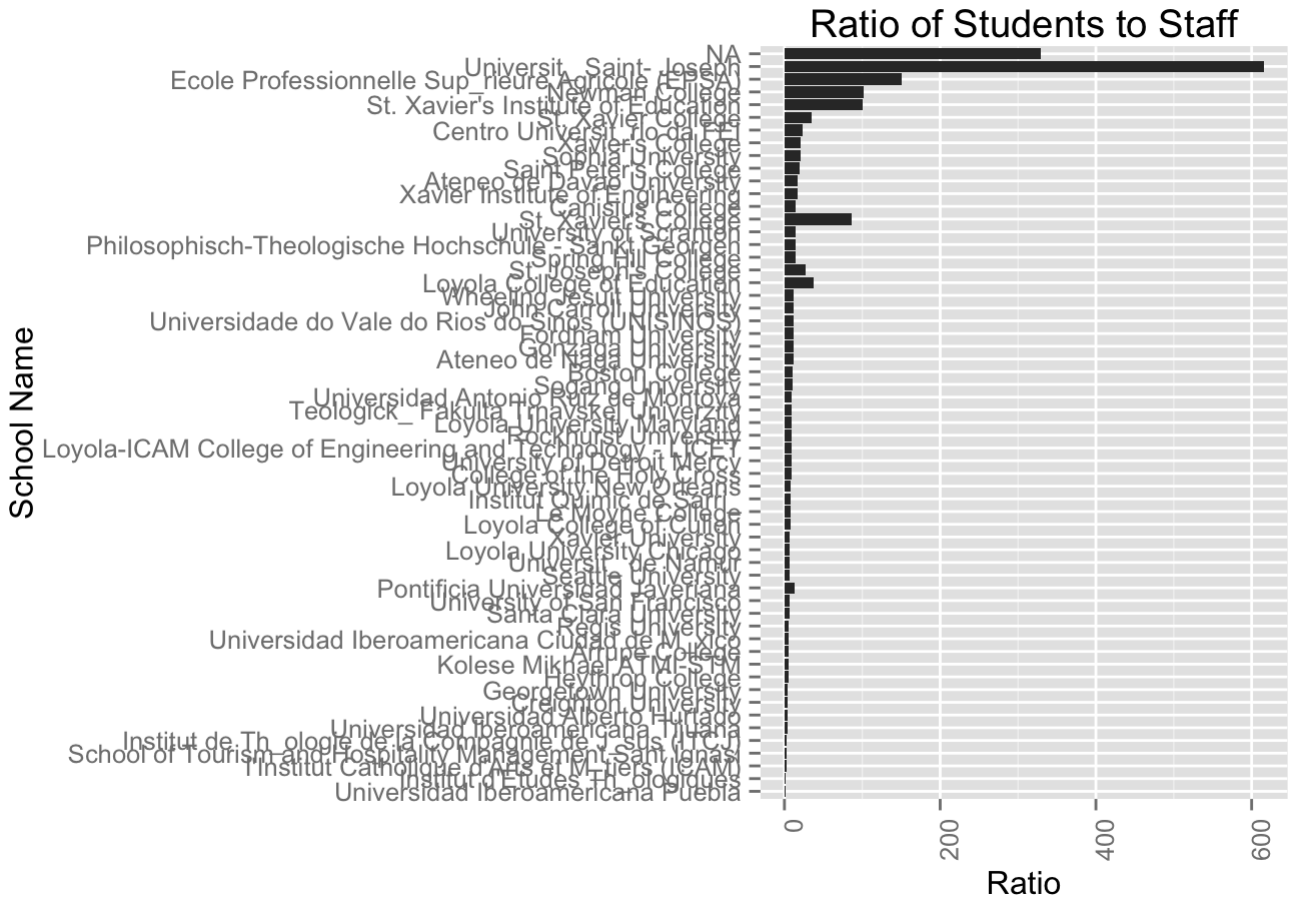



```
## Warning: Removed 55 rows containing missing values (stat_smooth).
```

```
## Warning: Removed 55 rows containing missing values (geom_point).
```

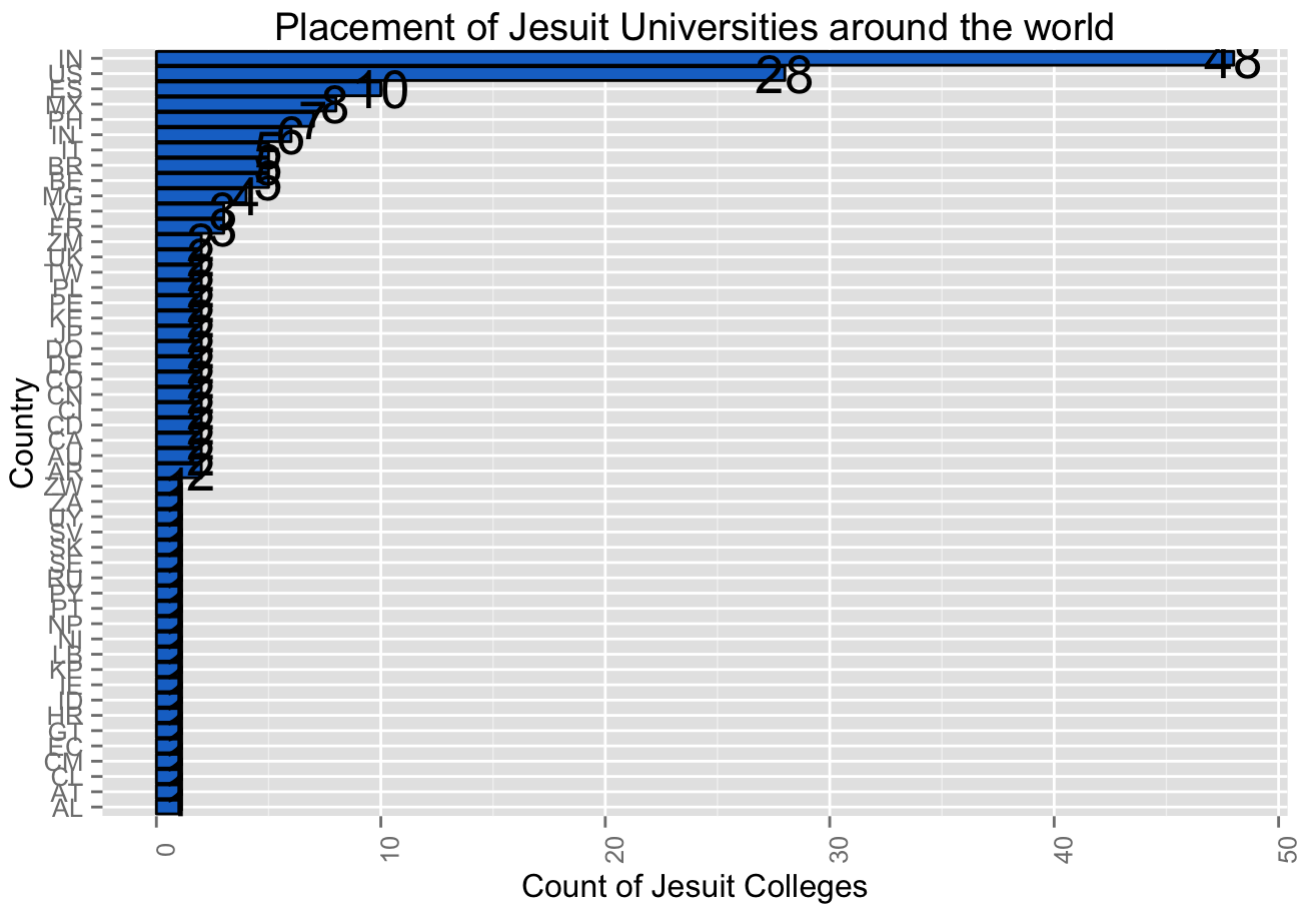



```
## Warning: Removed 78 rows containing missing values (position_stack).
```



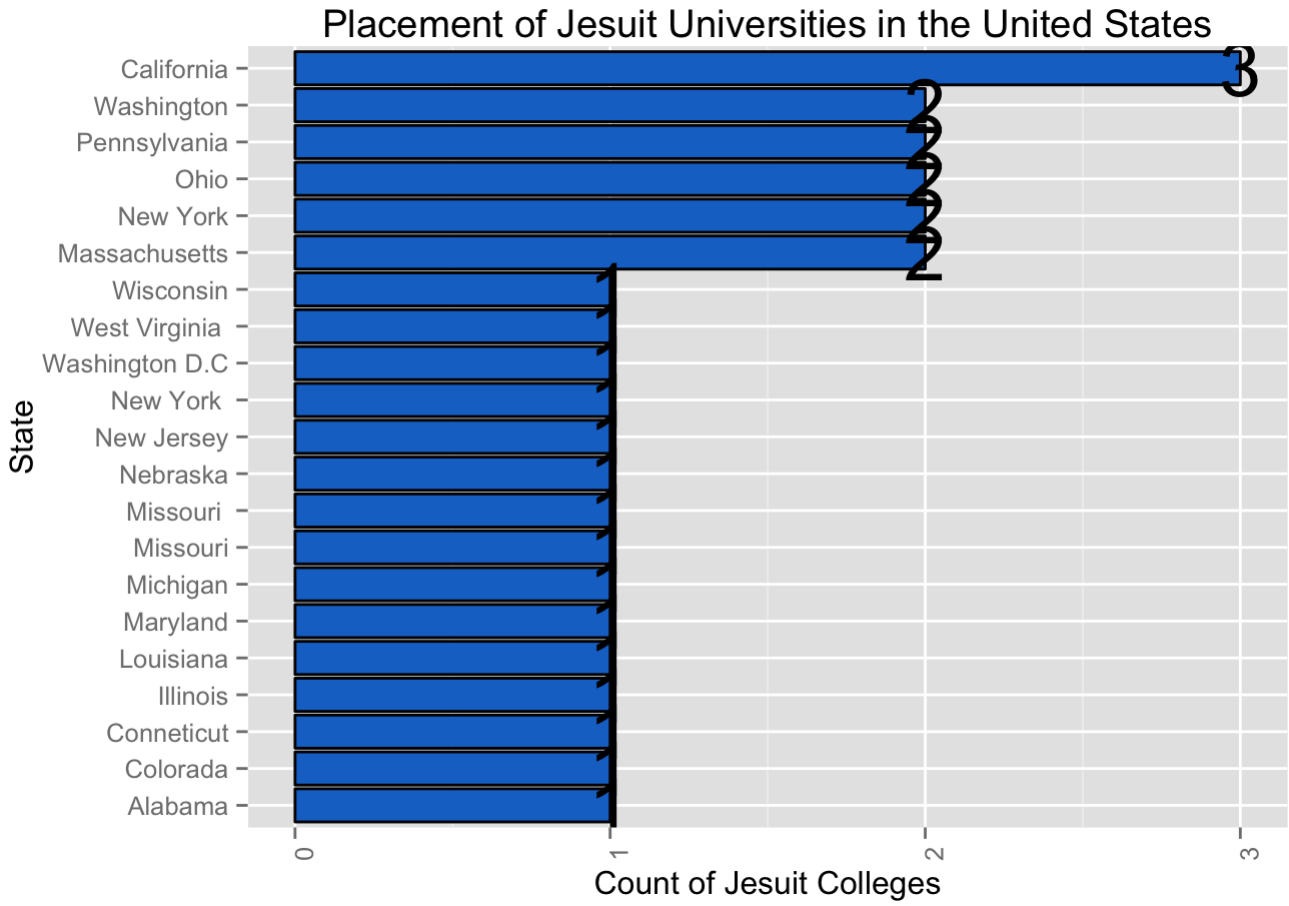
```
#ALI'S PART
setwd("~/Desktop/finalproject/table8")


## BAR CHART FOR NUMBER OF STAFF FOR EACH SCHOOL - WORKS BUT CANT ORDER GREATEST TO L
EAST
myplot2=jccdata%>%dimple(
    x = c("Name"), y = "Staff",
    groups = "Name", type = "bar",width=2000,height=700)%>%
   add_legend()
saveWidget(myplot2,file = "myplot2.html",selfcontained = TRUE)


#ALL THE JESUIT SCHOOLS IN THE US

#ALL THE JESUIT SCHOOLS IN THE US (number of students)
op<- options(gvis.plot.tag='chart')
usjes <- read.csv(file="usjes.csv",head=TRUE)
#students NOT SHOWING
GeoStates <- gvisGeoChart(usjes, "State", "Students", options = list(region= "US", di
splayMode="regions", resolution="provinces", width=600, height=400))
print(GeoStates,file="ali3a.html")
#numberofschools
GeoStates <- gvisGeoChart(usjes, "State", "NumberofSchools", options = list(region=
"US", displayMode="regions", resolution="provinces", width=600, height=400))
print(GeoStates,file="ali3aaa.html")

##ALL JESUIT SCHOOLS IN INDIA
india2 <- read.csv(file="india.csv",head=TRUE)

GeoStates <- gvisGeoChart(india2, "State", "NumberofSchools", options = list(region=
"IN", displayMode="regions", resolution="provinces", width=600, height=400))
print(GeoStates,file="ali3aa.html")


##parcoords THIS ONE WORKS
school <- read.csv("school.csv")
if (!require("parcoords")) devtools::install_github("timelyportfolio/parcoords")

aliplot=parcoords(school, rownames=FALSE,brushMode = "1D-axes-multi", width=1000, hei
ght=2000)
saveWidget(aliplot,file = "aliplot.html",selfcontained = TRUE)

##NUMBER OF JESUIT SCHOOLS IN EACH COUNTRY
Jesuit2 <- read.csv("~/Desktop/finalproject/table8/JesuitColleges_Cleaned.csv")
#Race
dfali=Jesuit2 %>% group_by(value)%>% summarise(count=length(value))


ggplot(dfali, aes(x=reorder(value, count),y=count)) +geom_bar(stat = "identity",fill=
 "dodgerblue3",colour="black") + theme(axis.text.x = element_text(angle = 90))+
xlab("Country")  + scale_fill_discrete(name="Type of \nRace")+ ylab("Count of Jesuit
 Colleges")+ ggtitle("Placement of Jesuit Universities around the
world")+coord_flip()+geom_text(aes(label=count), vjust=0.5, colour="black",position=p
osition_dodge(1), size=7)
```

```
## ymax not defined: adjusting position using y instead
```




```
##NUMBER OF JESUIT SCHOOL IN UNITED STATES

Jesuit21 <- read.csv("~/Desktop/finalproject/table8/Jesuit21.csv")
#Race
dfali2=Jesuit21 %>% group_by(State)%>% summarise(count=length(State))

ggplot(dfali2, aes(x=reorder(State, count),y=count)) +geom_bar(stat =
"identity",fill= "dodgerblue3",colour="black") + theme(axis.text.x = element_text(ang
le = 90))+ xlab("State")  + scale_fill_discrete(name="Type of \nRace")+ ylab("Count o
f Jesuit Colleges")+ ggtitle("Placement of Jesuit Universities in the United
States")+ coord_flip()+geom_text(aes(label=count), vjust=0.5,
colour="black",position=position_dodge(1), size=10)
```

```
## ymax not defined: adjusting position using y instead
```




```
## Jesuit Schools and numbers for entire world interactive
school4 <- read.csv("school4.csv")
school44=school4 %>% group_by(Country) %>% summarise(count=length(Country))

myplot222=school44 %>%dimple(
    x = c("Country"), y = "count",
    groups = "Country", type = "bar",width=2000,height=700)%>%
   add_legend()
saveWidget(myplot222,file = "myplot222.html",selfcontained = TRUE)


## Jesuit Schools and numbers for United States interactive
#JESUIT NOT FOUND?
schoolus=usjes %>% group_by(State) %>% summarise(count=length(State))

myplot2222=schoolus %>%dimple(
    x = c("State"), y = "count",
    groups = "State", type = "bar",width=2000,height=700)%>%
   add_legend()
saveWidget(myplot2222,file = "myplot2222.html",selfcontained = TRUE)
```