## **Assesment**

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12/31/2021

## R Markdown

This is an R Markdown document. Markdown is a simple formatting syntax for authoring HTML, PDF, and MS Word documents. For more details on using R Markdown see <a href="http://rmarkdown.rstudio.com">http://rmarkdown.rstudio.com</a>.

When you click the **Knit** button a document will be generated that includes both content as well as the output of any embedded R code chunks within the document. You can embed an R code chunk like this:

```
library(gtrendsR)
## Warning: package 'gtrendsR' was built under R version 4.1.2
searched_data=gtrendsR::gtrends('machine learning')
searched country=searched data$interest by country
searched_country
##
                                      location hits
                                                              keyword
                                                                        geo
gprop
## 1
                                         China
                                                100 machine learning world
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## 2
                                     Singapore
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## 15	Botswana	NA machine learning world
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## 74 web	Antigua & Barbuda	NA machine learning world
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## 212	St. Barthélemy	NA machine learning world
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## 224	Kiribati	NA machine learning world
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na_removed=na.omit(searched_country)
#na_removed=searched_country[which(searched_country$hits!=NA),]
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14 machine learning world

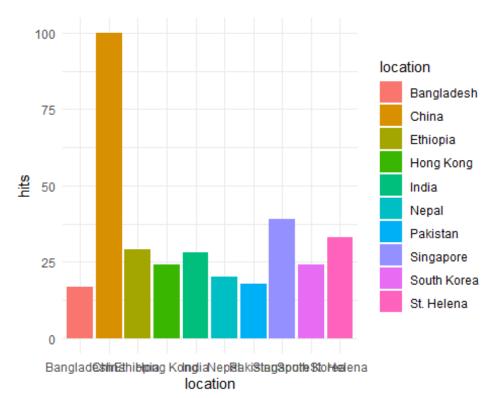
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top 10=head(na removed, 10)
top_10
##
         location hits
                                keyword
                                          geo gprop
## 1
            China 100 machine learning world
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        Singapore 39 machine learning world
## 2
                                                web
       St. Helena 33 machine learning world
## 3
                                                web
## 4
         Ethiopia 29 machine learning world
                                                web
            India
                    28 machine learning world
## 5
                                                web
## 7
        Hong Kong 24 machine learning world
                                                web
                   24 machine learning world
## 8
      South Korea
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## 10
            Nepal
                    20 machine learning world
                                                web
## 11
         Pakistan
                    18 machine learning world
                                                web
## 12
      Bangladesh
                    17 machine learning world
                                                web
library(ggplot2)
## Warning: package 'ggplot2' was built under R version 4.1.2
p<-ggplot(top_10, aes(x=location, y=hits, fill=location)) +</pre>
  geom_bar(stat="identity")+theme_minimal()
р
```



```
library(ggplot2)
library(dplyr)
## Warning: package 'dplyr' was built under R version 4.1.2
```

```
##
## 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(plotly)
## Warning: package 'plotly' was built under R version 4.1.2
##
## Attaching package: 'plotly'
## The following object is masked from 'package:ggplot2':
##
##
       last_plot
## The following object is masked from 'package:stats':
##
##
       filter
## The following object is masked from 'package:graphics':
##
##
       layout
library(hrbrthemes)
## Warning: package 'hrbrthemes' was built under R version 4.1.2
## NOTE: Either Arial Narrow or Roboto Condensed fonts are required to use
these themes.
         Please use hrbrthemes::import_roboto_condensed() to install Roboto
Condensed and
##
         if Arial Narrow is not on your system, please see
https://bit.ly/arialnarrow
#data <-
read.table("https://raw.githubusercontent.com/holtzy/data_to_viz/master/Examp
Le_dataset/3_TwoNumOrdered.csv", header=T)
#data$date <- as.Date(data$date)</pre>
#data
over_time=searched_data$interest_over_time
over_time
##
             date hits
                                keyword
                                                    time gprop category
                                          geo
       2017-01-01 41 machine learning world today+5-y web
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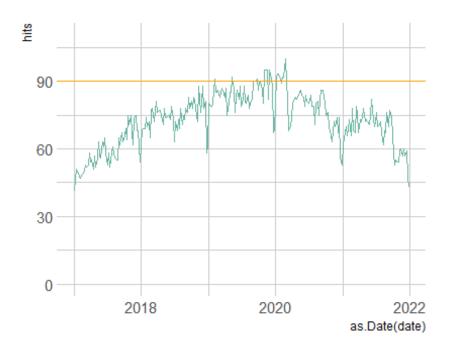
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over time %>%
  ggplot( aes(x=as.Date(date), y=hits)) +
    geom line(color="#69b3a2") +
    ylim(0,110) +
    annotate(geom="text", x=as.Date("2017-01-01"), y=2089,
             label="Bitcoin price reached 20k $\nat the end of 2017") +
    annotate(geom="point", x=as.Date("2017-01-17"), y=2089, size=20,
shape=21, fill="transparent") +
    geom_hline(yintercept=90, color="orange", size=.5) +
    theme ipsum()
## Warning: Removed 1 rows containing missing values (geom text).
## Warning: Removed 1 rows containing missing values (geom_point).
## Warning in grid.Call(C stringMetric, as.graphicsAnnot(x$label)): font
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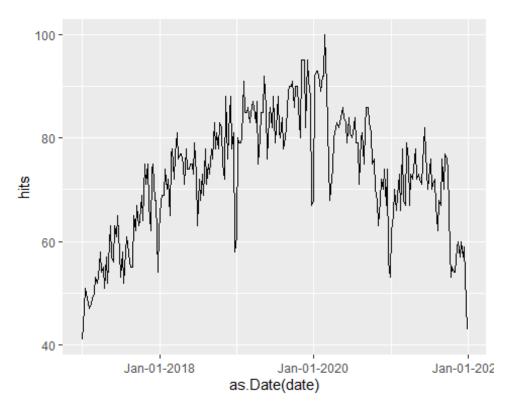
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```



```
ggplot(over_time, aes(x=as.Date(date), y=hits)) +
  geom_line() + scale_x_date(date_labels = "%b-%d-%Y")
```



```
typeof(as.Date(over_time$date))
## [1] "double"
summary(cars)
##
        speed
                       dist
                  Min. : 2.00
   Min.
##
         : 4.0
##
    1st Qu.:12.0
                  1st Qu.: 26.00
##
   Median :15.0
                  Median : 36.00
##
   Mean
          :15.4
                  Mean
                        : 42.98
                  3rd Qu.: 56.00
   3rd Qu.:19.0
##
   Max. :25.0
                  Max. :120.00
```

## **Including Plots**

You can also embed plots, for example:



Note that the echo  $\,=\,$  FALSE parameter was added to the code chunk to prevent printing of the R code that generated the plot.