NYPD Shooting RMD

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Introduction

About the data:

List of every shooting incident that occurred in NYC going back to 2006 through the end of the previous calendar year.

This is a breakdown of every shooting incident that occurred in NYC going back to 2006 through the end of the previous calendar year. This data is manually extracted every quarter and reviewed by the Office of Management Analysis and Planning before being posted on the NYPD website. Each record represents a shooting incident in NYC and includes information about the event, the location and time of occurrence. In addition, information related to suspect and victim demographics is also included.

Github account: https://github.com/brst2640/DSAF_final_project

URL: https://catalog.data.gov/dataset/nypd-shooting-incident-data-historic

Required packages:

This Rmd file depends on the following libraries:

- tibble
- magrittr
- data.table
- ggplot

Step 1: Start an Rmd Document

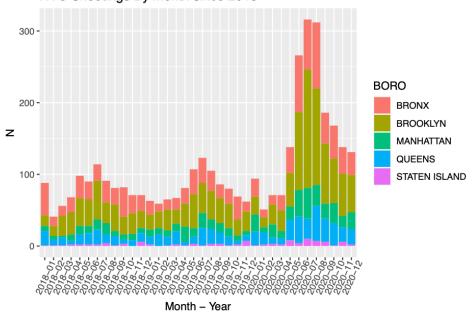
```
library(tibble)
library(magrittr)
library(data.table)
library(ggplot2)
main <- read.csv("https://data.cityofnewyork.us/api/views/833y-fsy8/rows.csv?accessType=DOWNLOAD") %>%;
```

Step 2: Tidy and Transform Your Data

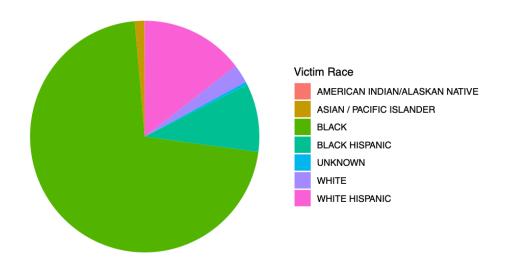
```
## # A tibble: 23,568 x 19
##
      INCIDENT_KEY OCCUR_DATE OCCUR_TIME BORO
                                                       PRECINCT JURISDICTION_CODE
            <int> <chr>
##
                                                          <int>
                                                                             <int>
                              <chr>
                                         <chr>
##
         201575314 08/23/2019 22:10:00
                                         QUEENS
                                                            103
##
         205748546 11/27/2019 15:54:00
                                         BRONX
                                                             40
                                                                                 0
   2
##
         193118596 02/02/2019 19:40:00
                                         MANHATTAN
                                                             23
                                                                                 0
##
         204192600 10/24/2019 00:52:00
                                         STATEN ISLAND
                                                            121
                                                                                0
   4
##
         201483468 08/22/2019 18:03:00
                                         BRONX
```

```
## 6
        198255460 06/07/2019 17:50:00 BROOKLYN
                                                          73
## 7
        194570529 03/11/2019 16:30:00 BROOKLYN
                                                                             0
                                                          81
## 8
        203211777 10/03/2019 01:45:00
                                       BROOKLYN
                                                          67
                                                                             0
## 9
        193694863 02/17/2019 03:00:00
                                       QUEENS
                                                          114
                                                                             2
## 10
        199582060 07/10/2019 02:56:00 BROOKLYN
                                                          69
## # ... with 23,558 more rows, and 13 more variables: LOCATION_DESC <chr>,
## #
      STATISTICAL_MURDER_FLAG <chr>, PERP_AGE_GROUP <chr>, PERP_SEX <chr>,
## #
      PERP_RACE <chr>, VIC_AGE_GROUP <chr>, VIC_SEX <chr>, VIC_RACE <chr>,
## #
      X_COORD_CD <chr>, Y_COORD_CD <chr>, Latitude <dbl>, Longitude <dbl>,
## # Lon_Lat <chr>
```

Step 3: Add Visualizations and Analysis
NYC Shootings By Month since 2018



Pie Chart of Victim Race



Step 4: Conclusion and Bias Identification

This has been a short introduction to the NYPD Shootings data set and some key statistics and takeaways from the data. As a white male who lives on the west coast, I have not experienced what many others, particularly people of color, have experienced in the different New York neighborhoods, and in that respect am biased towards my own personal history. In order to mitigate this, I provided visualizations on the proportion of shooting victims by race and the number of shootings over time by New York Neighborhood.

Session Info

```
## R version 4.1.1 (2021-08-10)
## Platform: x86_64-apple-darwin17.0 (64-bit)
## Running under: macOS Mojave 10.14.6
## Matrix products: default
## BLAS: /Library/Frameworks/R.framework/Versions/4.1/Resources/lib/libRblas.0.dylib
## LAPACK: /Library/Frameworks/R.framework/Versions/4.1/Resources/lib/libRlapack.dylib
##
## locale:
## [1] en_US.UTF-8/en_US.UTF-8/en_US.UTF-8/c/en_US.UTF-8/en_US.UTF-8
## attached base packages:
## [1] stats
                graphics grDevices utils
                                             datasets methods
## other attached packages:
                       data.table_1.14.0 magrittr_2.0.1 tibble_3.1.4
## [1] ggplot2_3.3.5
## loaded via a namespace (and not attached):
## [1] knitr 1.34
                       munsell 0.5.0
                                        colorspace 2.0-2 R6 2.5.1
## [5] rlang_0.4.11
                        fastmap_1.1.0
                                        fansi_0.5.0
                                                         highr_0.9
                        tools_4.1.1
                                        grid_4.1.1
## [9] stringr_1.4.0
                                                         gtable_0.3.0
## [13] xfun_0.25
                        utf8_1.2.2
                                        cli_3.0.1
                                                         withr_2.4.2
## [17] htmltools_0.5.2 ellipsis_0.3.2 yaml_2.2.1
                                                         digest_0.6.27
## [21] lifecycle_1.0.0 crayon_1.4.1
                                        farver_2.1.0
                                                         vctrs_0.3.8
## [25] glue_1.4.2
                        evaluate_0.14
                                        rmarkdown_2.10 labeling_0.4.2
## [29] stringi_1.7.4
                        compiler_4.1.1 pillar_1.6.2
                                                         scales_1.1.1
## [33] pkgconfig_2.0.3
```