R Notebook

Code

This is an R notebook for United Nations General Assembly Voting Data (https://dataverse.harvard.edu/dataset.xhtml?persistentId=doi:10.7910/DVN/LEJUQZ). The dataset indicates the voting patterns of member countries of United Nations from 1946 to 2020. The data Code book can be downloaded here source (https://dataverse.harvard.edu/api/access/datafile/:persistentId?persistentId=doi:10.7910/DVN/LEJUQZ/DYNZPA)

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```
# loading libraries
library(readr)
library(visdat)
library(ggplot2)
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
```

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```
path = "C:/Users/adeso/Desktop/Training/Portfolio/Data/UNVotes.csv"
un_raw = read.csv(path)
head(un_raw)
```

	X <int>	rcid <int>	cco… <int>	mem… <int>	vote <int>	Country <chr>	Countryname <chr>	year <int>	session <int>
1	1	3	2	1	1	USA	United States of America	1946	1
2	2	3	20	1	3	CAN	Canada	1946	1
3	3	3	31	*NA*	9	BHS	Bahamas	1946	1
4	4	3	40	1	1	CUB	Cuba	1946	1
5	5	3	41	1	1	HTI	Haiti	1946	1
6	6	3	42	1	1	DOM	Dominican Republic	1946	1

6 rows | 1-10 of 27 columns

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```
# Select columns important to the objective of the project
un_df = subset(un_raw, select = c(vote, Country, Countryname, year, session)) %>%
  mutate(session = session + 1945) %>%
  filter(vote <= 3)
head(un_df)
```

	vote <int>	Country <chr>	Countryname <chr>	year <int>	session <dbl>
1	1	USA	United States of America	1946	1946
2	3	CAN	Canada	1946	1946
3	1	CUB	Cuba	1946	1946
4	1	HTI	Haiti	1946	1946
5	1	DOM	Dominican Republic	1946	1946
6	1	MEX	Mexico	1946	1946

6 rows

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```
glimpse(un_df)
```

```
Rows: 887,094
Columns: 5
$ vote        <int> 1, 3, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, ~
$ Country     <chr> "USA", "CAN", "CUB", "HTI", "DOM", "MEX", "GTM", "HND", "SLV", ~
$ Countryname <chr> "United States of America", "Canada", "Cuba", "Haiti", "Dominic~
$ year        <int> 1946, 1946, 1946, 1946, 1946, 1946, 1946, 1946, 1946, 1946, 194~
$ session     <dbl> 1946, 1946, 1946, 1946, 1946, 1946, 1946, 1946, 1946, 1946, 194~
```

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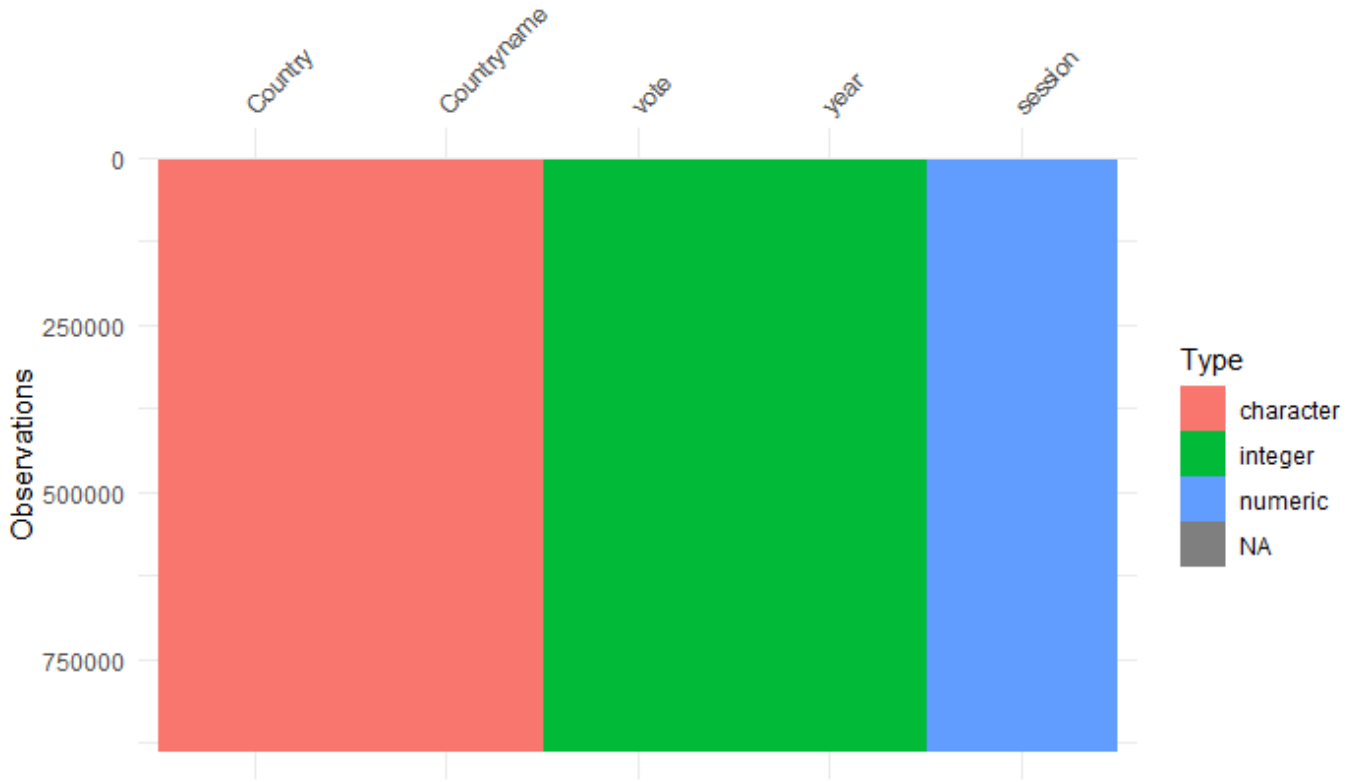
```
vis_dat(un_df, warn_large_data = FALSE)
```



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```
summ_by_year = un_df %>% group_by(year) %>%
  summarise(total = n(),
            percent_vote_Yes = mean(vote == 1),
            percent_Abstain = mean(vote == 2),
            percent_vote_No = mean(vote == 3))
summ_by_year
```

year <int>	total <int>	percent_vote_Yes <dbl>	percent_Abstain <dbl>	percent_vote_No <dbl>
1946	2143	0.5734951	0.12599160	0.30051330
1947	2039	0.5693968	0.13683178	0.29377146
1948	3454	0.3998263	0.19976838	0.40040533
1949	5700	0.4254386	0.22438596	0.35017544
1950	2911	0.4970800	0.17622810	0.32669186
1951	402	0.6567164	0.12935323	0.21393035
1952	4082	0.5460559	0.19230769	0.26163645
1953	1537	0.6317502	0.16590761	0.20234223
1954	1788	0.6224832	0.20190157	0.17561521
1955	2169	0.6947902	0.14384509	0.16136468

1-10 of 74 rows Previous **1** 2 3 4 5 6 ... 8 Next

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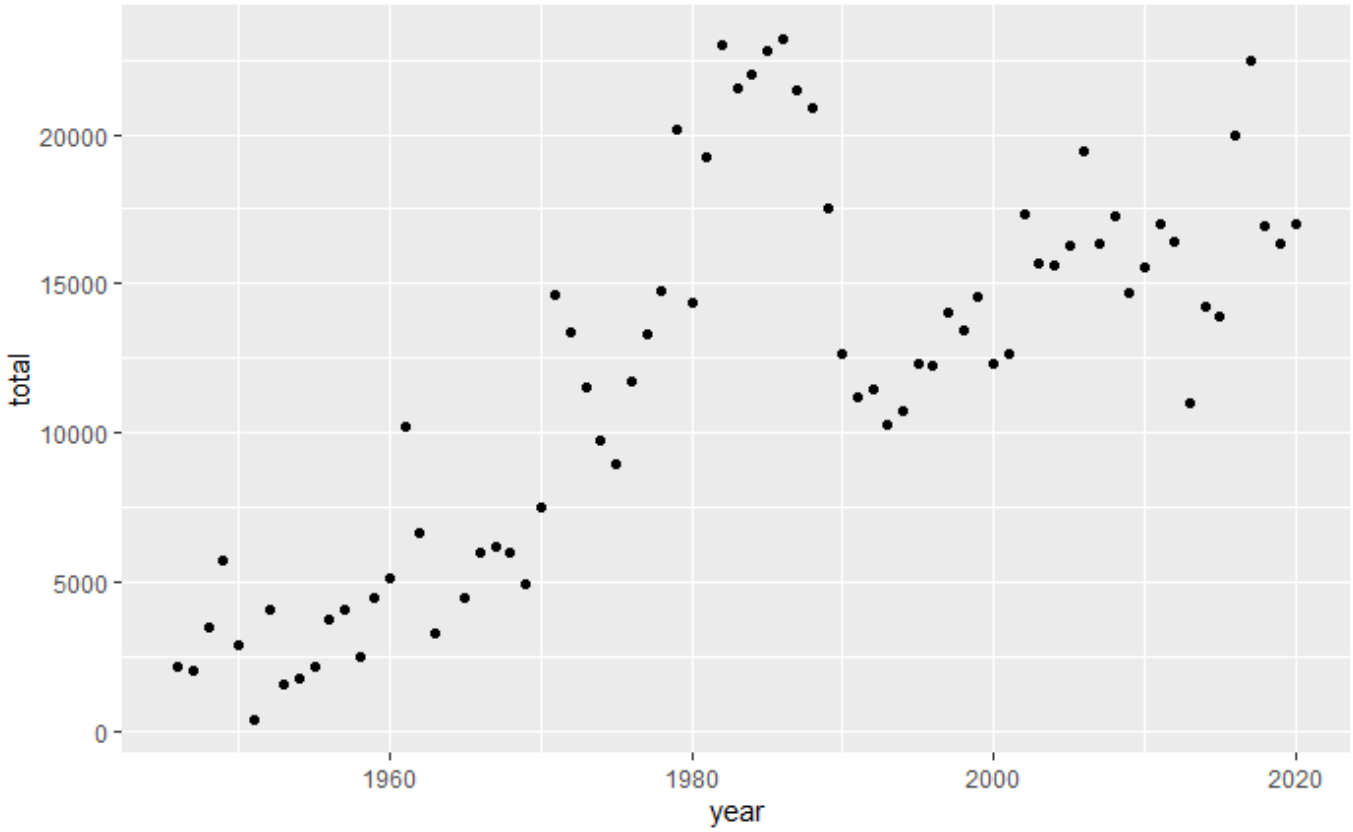
```
ggplot(summ_by_year, aes(year,  total)) +
  geom_point()
```



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```
ctry = c("Nigeria","Ghana","Egypt","Morocco","Ethiopia","Kenya","South Africa", "Namibia","An
gola","Gabon", "United States of America", "France", "United Kingdom of Great Britain and Nor
thern Ireland")

sum_country = un_df %>% group_by(Countryname, year) %>%
  filter(Countryname %in% ctry) %>%
  summarise(total = n(),
            percent_vote_Yes = mean(vote == 1),
            percent_ab = mean(vote == 2),
            percent_vote_No = mean(vote == 3)) %>%
  arrange(desc(percent_vote_Yes))
```

```
`summarise()` has grouped output by 'Countryname'. You can override using the
`.groups` argument.
```

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```
sum_country
```

Countryname <chr>	y… <int>	total <int>	percent_vote_Ye <db
Angola	1976	4	1.0000000
Angola	1977	50	1.0000000

Countryname <chr>	y… <int>	total <int>	percent_vote_Ye <db
Egypt	1991	73	1.0000000
Ethiopia	1976	89	1.0000000
France	1951	7	1.0000000
Gabon	1991	73	1.0000000
Gabon	2000	69	1.0000000
Gabon	2007	82	1.0000000
Ghana	1976	82	1.0000000
Kenya	1963	3	1.0000000

1-10 of 805 rows | 1-5 of 6 columns Previous **1** 2 3 4 5 6 … 81 Next

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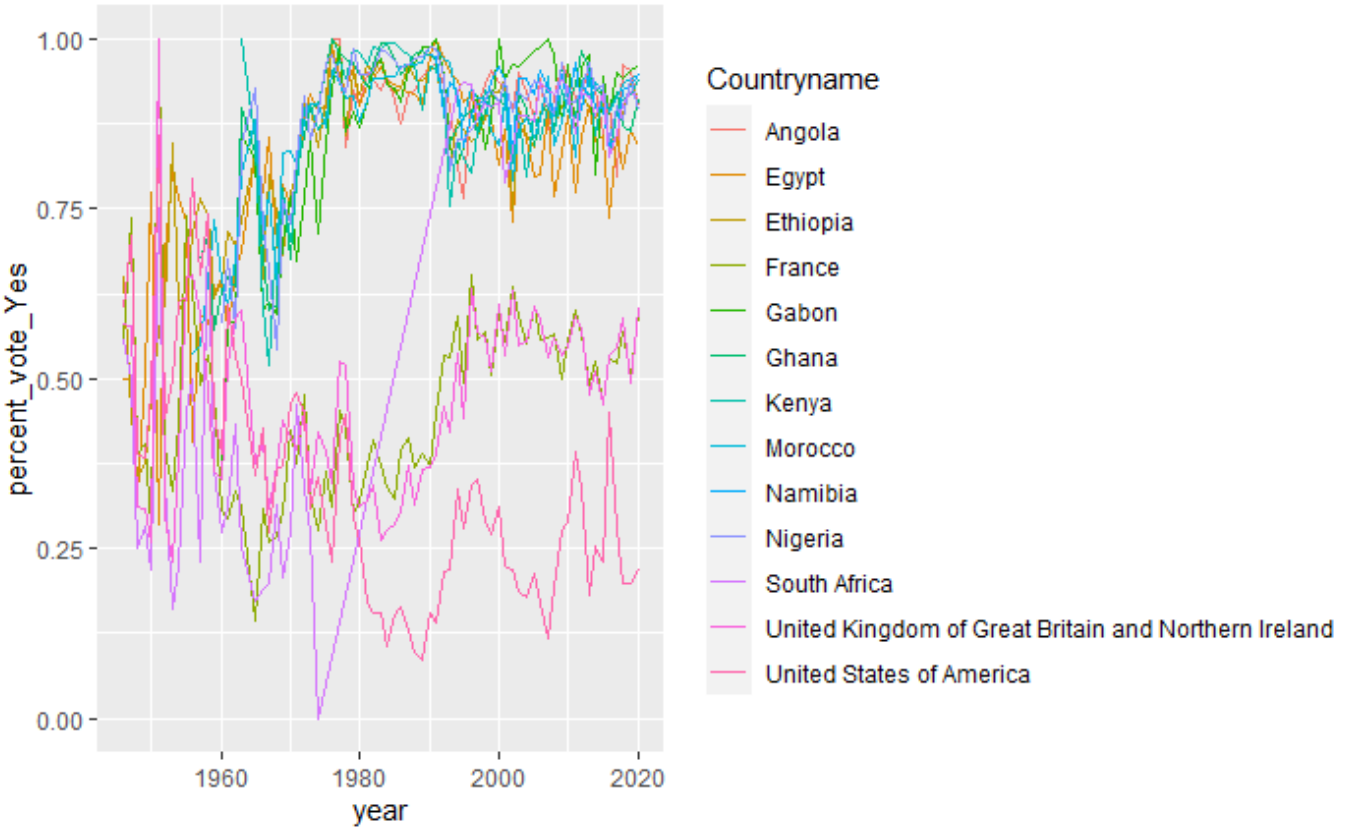
```
ggplot(sum_country , aes(year, percent_vote_Yes, color=Countryname)) +
geom_line()
```



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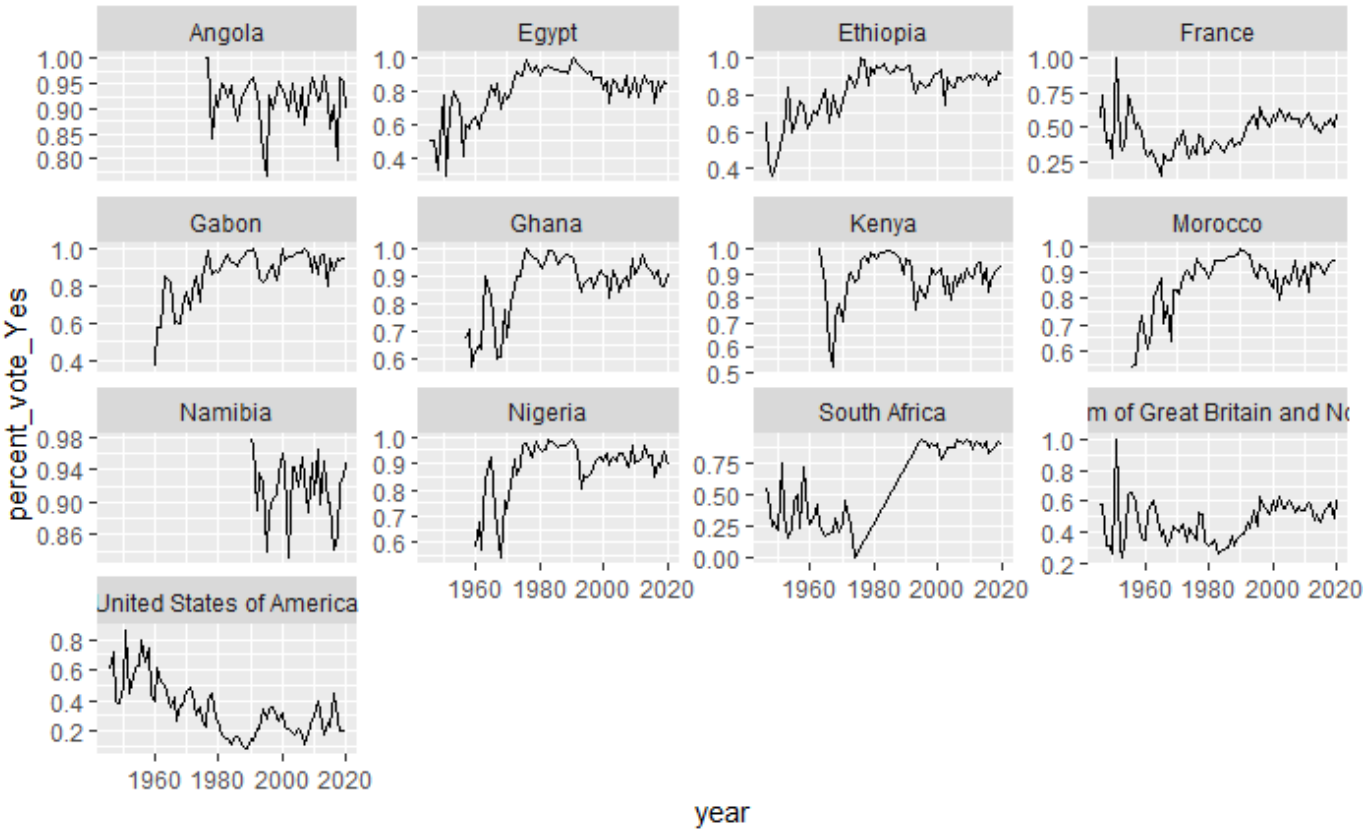
```
ggplot(sum_country , aes(year, percent_vote_Yes)) +
  geom_line() +
  facet_wrap(~Countryname, scales = "free_y")
```



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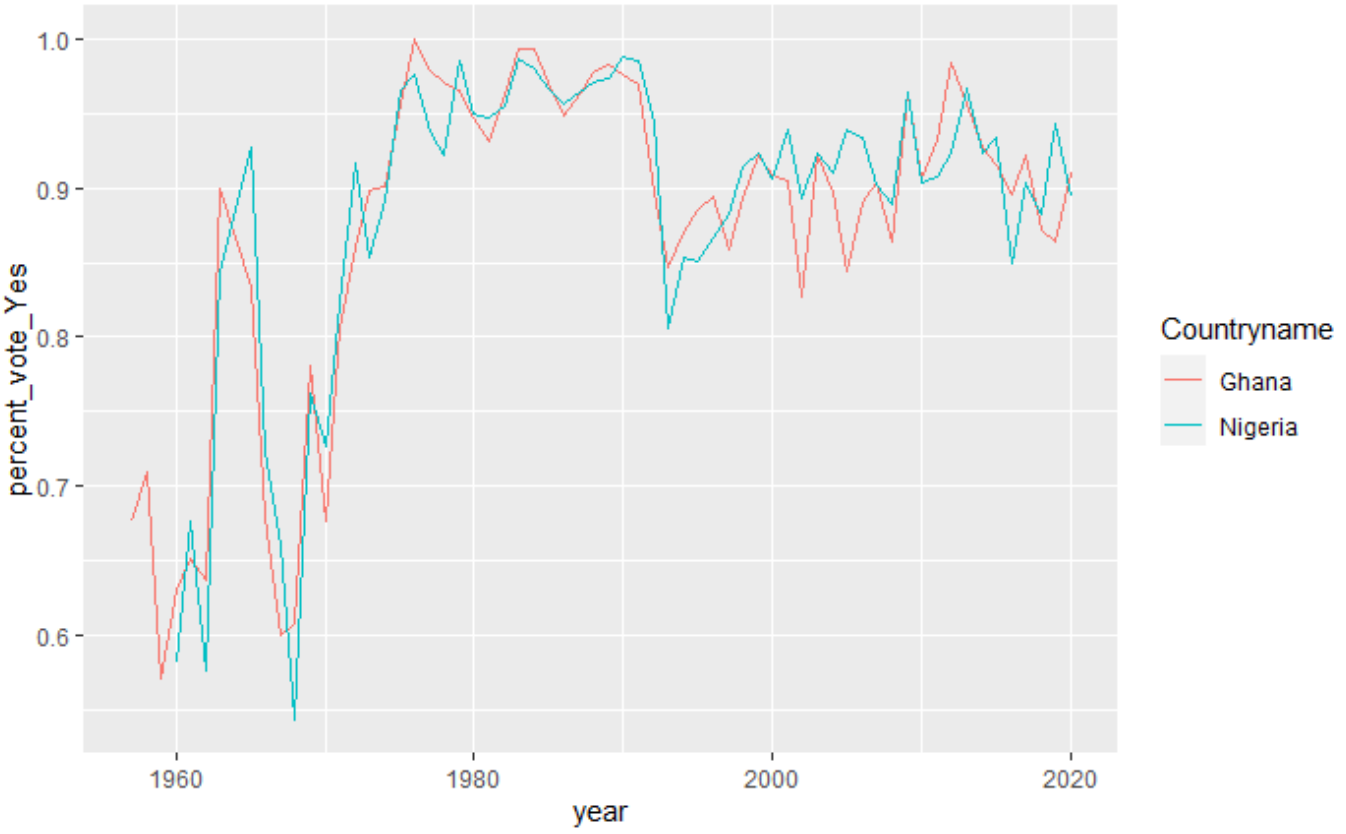
```
Nigeria_Ghana = sum_country %>% filter(Countryname %in% c("Nigeria", "Ghana"))
ggplot(Nigeria_Ghana , aes(year, percent_vote_Yes, color=Countryname)) +
  geom_line()
```



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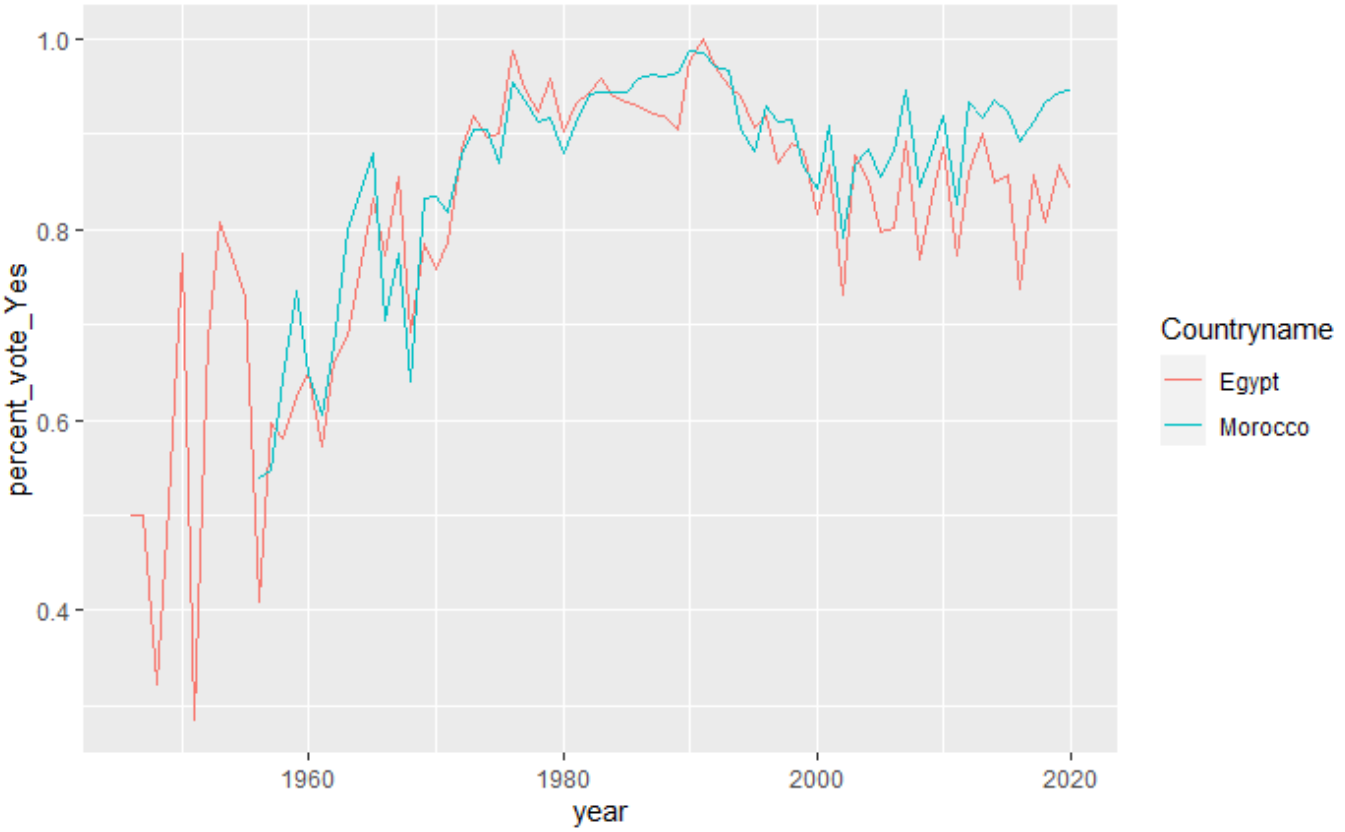
```
Morocco_Egypt = sum_country %>% filter(Countryname %in% c("Morocco", "Egypt"))
ggplot(Morocco_Egypt , aes(year, percent_vote_Yes, color=Countryname)) +
  geom_line()
```



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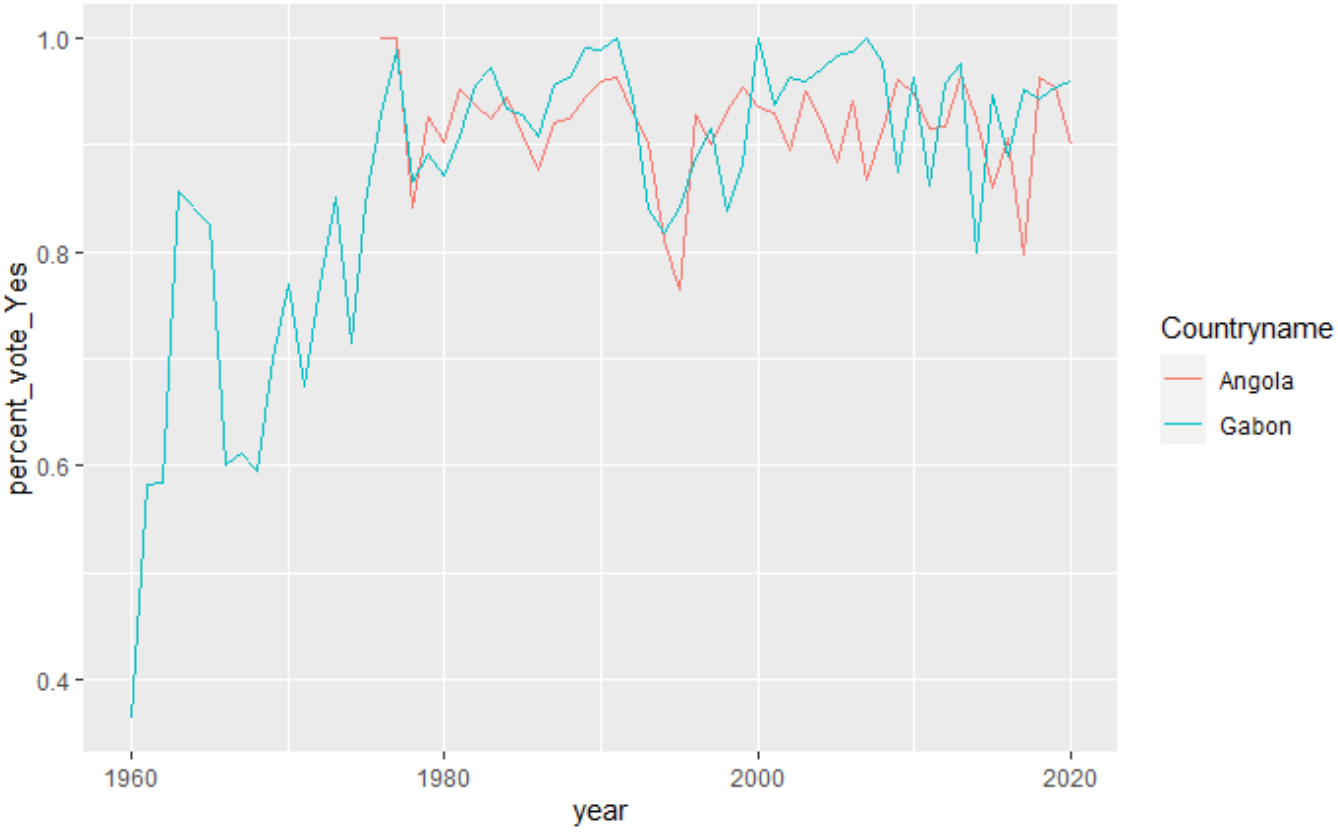
```
Kenya_Ethiopia = sum_country %>% filter(Countryname %in% c("Kenya", "Ethiopia"))
ggplot(Nigeria_Ghana , aes(year, percent_vote_Yes, color=Countryname)) +
  geom_line()
```



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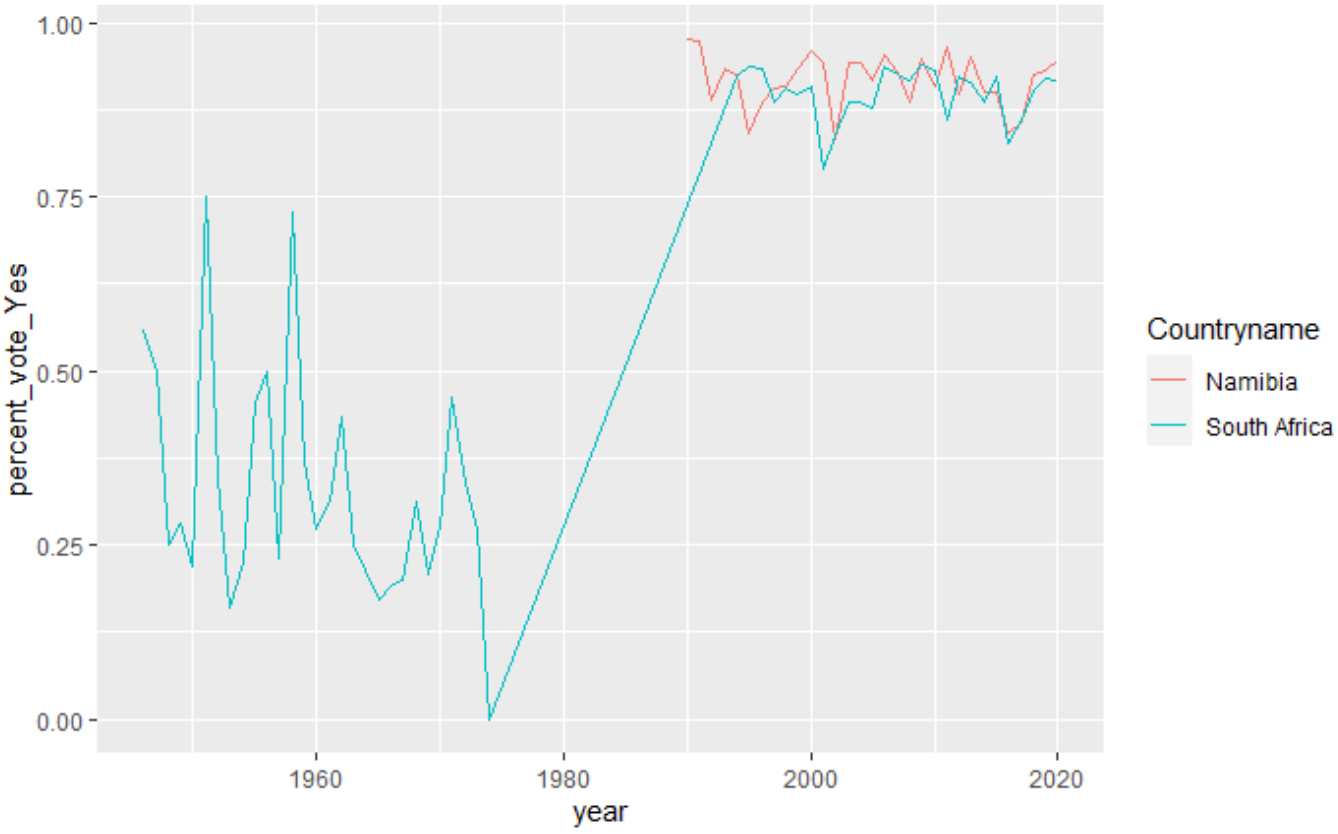
```
South_Africa_Namibia = sum_country %>% filter(Countryname %in% c("South Africa", "Namibia"))
ggplot(South_Africa_Namibia , aes(year, percent_vote_Yes, color=Countryname)) +
  geom_line()
```



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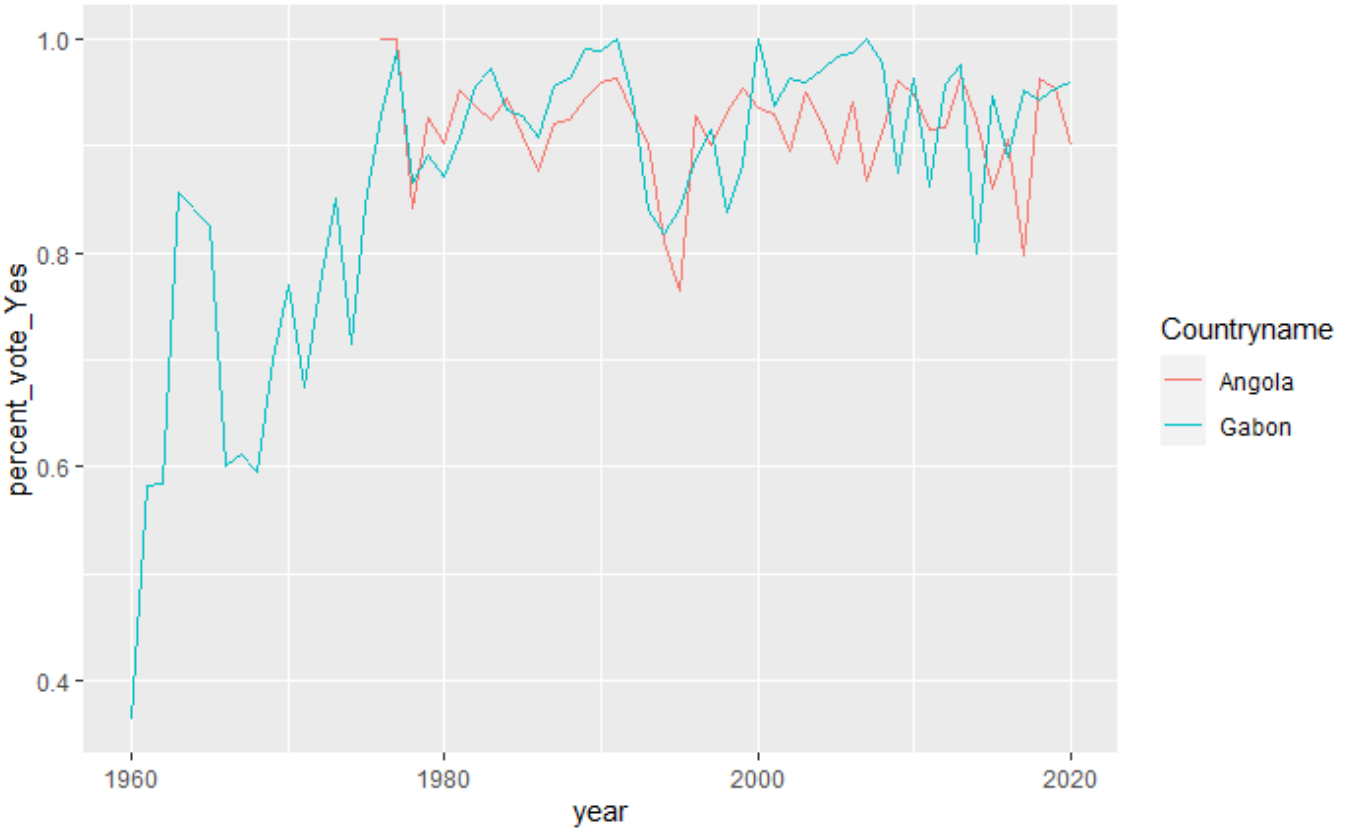
```
Angola_Gabon = sum_country %>% filter(Countryname %in% c("Angola", "Gabon"))
ggplot(Angola_Gabon , aes(year, percent_vote_Yes, color=Countryname)) +
  geom_line()
```



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```
un_data = un_df %>%
  mutate(vote = as.factor(vote),member = as.logical(member))

#vis_dat(un_df, warn_large_data = FALSE)
```

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```
head(un_data)
```

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```
countries <- c("USA", "UK",
               "CAN", "HTI", "CUB", "DOM")

un_data %>%
  group_by(year, Countryname) %>%
  filter(Country %in% countries, year == 2000) %>%
  summarise(total = n(), percent_yes = mean(vote == 1))
```

Add a new chunk by clicking the *Insert Chunk* button on the toolbar or by pressing *Ctrl+Alt+I*.

When you save the notebook, an HTML file containing the code and output will be saved alongside it (click the *Preview* button or press *Ctrl+Shift+K* to preview the HTML file).

The preview shows you a rendered HTML copy of the contents of the editor. Consequently, unlike *Knit*, *Preview* does not run any R code chunks. Instead, the output of the chunk when it was last run in the editor is displayed.