TaskA

zerofrom

2024-11-25

Q1. Data Wrangling

```
## [1] "debt_df: The number of columns:  63"
```

```
## [1] "debt_df: The number of rows:  13824"
```

Q2.Update data frame by reordering

```
##   Country.Code      Year NY.GNP.MKTP.CD DT.NFL.BLAT.CD
## 1          MEX year_1995    3.66827e+11     9398190731
## 2          EGY year_2013    2.81028e+11     7233642176
## 3          BRA year_2017    2.02494e+12     6506490468
## 4          PAK year_2018    3.50691e+11     6201281870
```

Q3. Create debt_df2 and replace indicator column names in debt_df by referring to indicator_df

```
##   Country.Code      Year Net financial flows, others (NFL, current US$)
## 1          MEX year_1995                                             NA
## 2          EGY year_2013                                      -14314777
## 3          BRA year_2017                                     -195705180
## 4          PAK year_2018                                      321846510
## 5          EGY year_2016                                     2141976215
```

Q4. Combine two data frames: debt_df and country_df

```
##        Country.Name        IncomeGroup      Year
## 1            Mexico Upper middle income year_1995
## 2 Egypt, Arab Rep. Lower middle income year_2013
## 3            Brazil Upper middle income year_2017
##   Total reserves in months of imports
## 1                             2.825546
## 2                             2.730040
## 3                            14.861069
```

Q5. Rename 5 columns from their original names to the new names
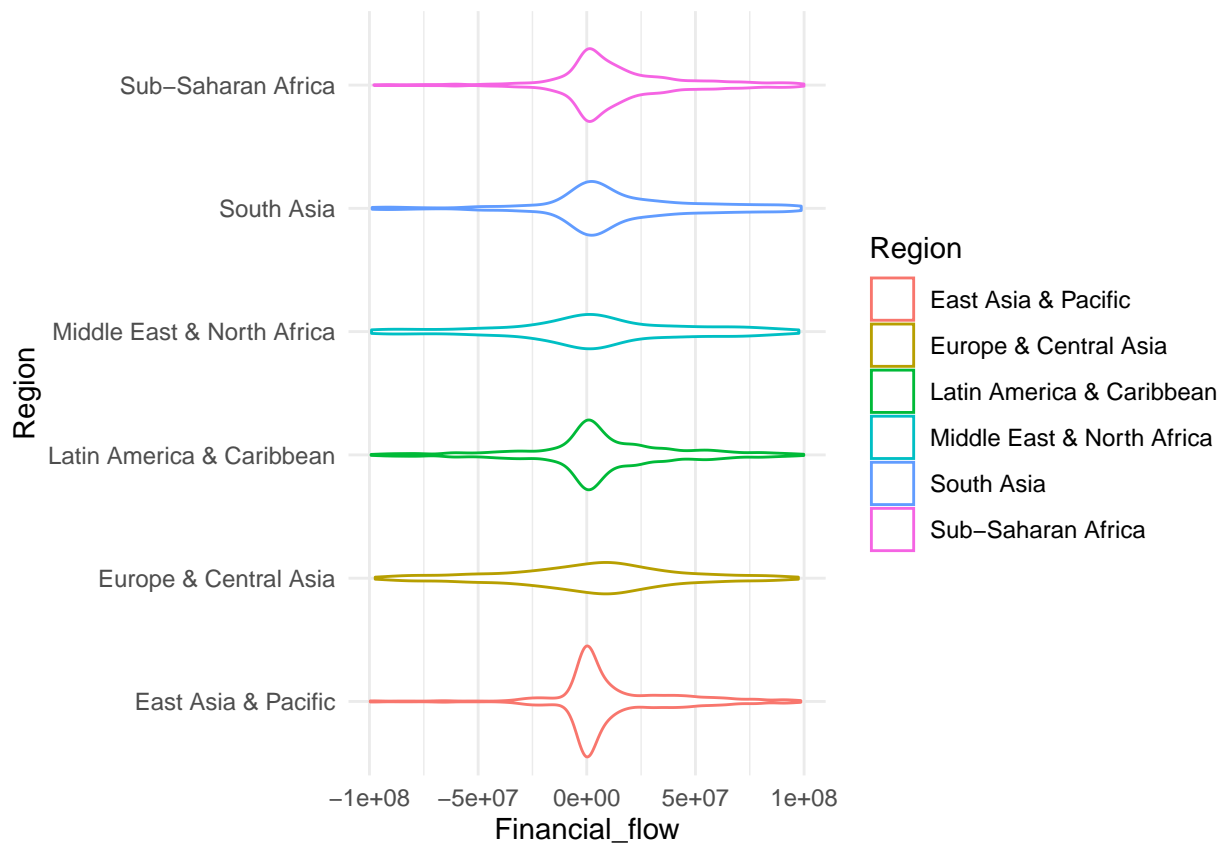
```
##   Country.Code      Year Total_reserves External_debt Financial_flow
## 1          MEX year_1995       2.825546  166734000000     9398190731
## 2          EGY year_2013       2.730040   46534987115     7233642176
```

```
## 3          BRA year_2017       14.861069  543000000000       6506490468
## 4          PAK year_2018        1.905231  100199000000       6201281870
## 5          EGY year_2016        3.885411   69188517055       5714011601
##         Imports        IFC
## 1  72391910000          0
## 2  72685700000  -42864095
## 3 301961000000  397855350
## 4  74555877000   11389136
## 5  73019900000   77244772
```

Q6. Create debt_summary

```
## # A tibble: 7 x 5
##   Region                     TR_mn       ED_md FF_quantile      IFC_sd
##   <chr>                      <dbl>       <dbl>       <dbl>       <dbl>
## 1 East Asia & Pacific         5.19  2248479410   -2357020. 52498519.
## 2 Europe & Central Asia       3.58  8237728122  -53631246. 50820255.
## 3 Latin America & Caribbean   3.84  4159662669  -25144268. 62054545.
## 4 Middle East & North Africa  7.72  7481954468  -92269932. 21414719.
## 5 North America               1.99          NA          NA         NA
## 6 South Asia                  4.94  4940329805    -373253. 76630044.
## 7 Sub-Saharan Africa          3.32  1709094992   -1673594. 24748455.
```

Q7. Create a violin plot of "Financial_flow" for each of the regions.

Q8. Create a plot which displays the "Total_reserves" as a function of the years (from 1960 to 2023)