PROJECT TITLE: Covid vaccine analysis

DAC\_Phase 4

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# Items in the dataset:

* Countries
* Dates
* Vaccines
* Total Vaccinations

# Desireddata to find:

* Most commonly used vaccines in countries
* Average daily vaccination count in countries -Number of

countries where vaccines are used

* Choropleth map of the most used vaccine

INPUT:

data=pd.DataFrame(columns=['Country', 'Vaccine', 'Total\_vaccine'])

for country in df["location"].unique():

for vaccine in df["vaccine"].unique():

filtered\_data = df[(df['location'] == country) & (df['vaccine']

== vaccine)]

total\_count = filtered\_data['total\_vaccinations'].max()

data = pd.concat([data, pd.DataFrame({'Country': [country], 'Vaccine': [vaccine], 'Total\_vaccine': [total\_count]})], ignore\_index=True)

# SUB-INPUT:

data.head(10)

# OUTPUT:

|  |  |  |  |
| --- | --- | --- | --- |
|  | Country | Vaccine | Total\_vaccine |
| 0 | Argentina | Moderna | 6507561 |
| 1 | Argentina | Oxford/AstraZeneca | 25977231 |
| 2 | Argentina | Sinopharm/Beijing | 28322602 |
| 3 | Argentina | Sputnik V | 20405678 |
| 4 | Argentina | CanSino | 610540 |
| 5 | Argentina | Pfizer/BioNTech | 14681054 |
| 6 | Argentina | Johnson&Johnson | NaN |
| 7 | Argentina | Novavax | NaN |
| 8 | Argentina | Sinovac | NaN |
| 9 | Argentina | Covaxin | NaN |

**Most commonly used vaccines**

# INPUT:

data\_2=pd.DataFrame(columns=['Country', 'Vaccine']) data["Total\_vaccine"] = pd.to\_numeric(data["Total\_vaccine"], errors="coerce")

for country **in** data["Country"].unique():

new\_data = data[data["Country"] == country]

max\_vaccine = new\_data.loc[new\_data["Total\_vaccine"].idxm

ax(), "Vaccine"]

data\_2 = pd.concat([data\_2, pd.DataFrame({'Country': [countr y], 'Vaccine': [max\_vaccine]})], ignore\_index=True)

**SUB-INPUT:**

data\_2.head()

# OUTPUT:

|  |  |  |
| --- | --- | --- |
|  | Country | Vaccine |
| 0 | Argentina | Sinopharm/Beijing |
| 1 | Austria | Pfizer/BioNTech |
| 2 | Belgium | Pfizer/BioNTech |
| 3 | Bulgaria | Pfizer/BioNTech |
| **4** | **Chile** | **Sinovac** |

**INPUT:**

data\_2["Vaccine"].value\_counts().plot(kind="bar",

color=["Red","Gray","Gray","Gray"])

**OUTPUT:**

<Axes: >

