In [1]:
```python
cell to import libraries, ignore FutureWarnings, and load data sets
 geopandas as gpd
 pandas as pd
 matplotlib.pyplot as plt
 seaborn as sns
 contextily
 mapclassify
 folium
 aiohttp
 fsspec
 warnings
gs.filterwarnings('ignore', category=FutureWarning) # Ignore FutureWar
 sets
"https://raw.githubusercontent.com/babdelfa/gis/main/covid_global.csv"
d.read_csv(url)
gpd.read_file(gpd.datasets.get_path('naturalearth_lowres'))


ude your final below (in this cell only):
df[["pop_est","continent","iso_a3", "geometry"]].copy()
name(columns={"pop_est": "Population"}, inplace=True)
f[["iso_a3", "3/9/23"]]
ame(columns={"3/9/23": "Cases"}, inplace=True)
and merge data
 = pd.merge(left=gdf, right=df, left_on="iso_a3", right_on="iso_a3")



late population and total cases w/ table
"***********************************")
"Summary Statistics Per Continent")
"\tCumulative Total Cases Per Continent as of March 9, 2023")
"\tTotal Population Per Continent")
" ")
"***************Results**************")
" ")

a data

 = geo_df[geo_df['continent']=='Africa'].copy()
_total_cases = Africa["Cases"].sum()
_total_population = Africa["Population"].sum()
"Africa")
"\tTotal Cases:", Africa_total_cases)
"\tTotal Population:",Africa_total_population)
" ")

data
 geo_df[geo_df['continent']=='Asia'].copy()
```

```python
geo_df[geo_df["continent"]=="Asia"].copy()
otal_cases = Asia["Cases"].sum()
otal_population = Asia["Population"].sum()
"Asia")
"\tTotal Cases:", Asia_total_cases)
"\tTotal Population:",Asia_total_population)
" ")
e data
 = geo_df[geo_df['continent']=='Europe'].copy()
_total_cases = Europe["Cases"].sum()
_total_population = Europe["Population"].sum()
"Europe")
"\tTotal Cases:", Europe_total_cases)
"\tTotal Population:",Europe_total_population)
" ")
 America data
America = geo_df[geo_df['continent']=='North America'].copy()
America_total_cases = North_America["Cases"].sum()
America_total_population = North_America["Population"].sum()
"North America")
"\tTotal Cases:", North_America_total_cases)
"\tTotal Population:",North_America_total_population)
" ")
ia data
a = geo_df[geo_df['continent']=='Oceania'].copy()
a_total_cases = Oceania["Cases"].sum()
a_total_population = Oceania["Population"].sum()
"Oceania")
"\tTotal Cases:", Oceania_total_cases)
"\tTotal Population:",Oceania_total_population)
" ")
 America data
America = geo_df[geo_df['continent']=='South America'].copy()
America_total_cases = South_America["Cases"].sum()
America_total_population = South_America["Population"].sum()
"South America")
"\tTotal Cases:", South_America_total_cases)
"\tTotal Population:",South_America_total_population)
" ")
"**********************************")
" \n")


graph
"Trend of Cumulative Total Cases Per Continent from January 22, 2020 t
.groupby(["continent"])["Cases"].plot(legend=True)
cklabel_format(style ='plain',axis='y')
abel('Date')
abel('Number of Cases')
tle('COVID-19 Cases by Continent')
ow()
```

```
chropleth map
"World Choropleth Map\nCumulative Total Cases Per Country — Last Repor
.explore(column= "Cases", cmap="Reds_r",legend=True, scheme="NaturalBr
```

```
************************************
Summary Statistics Per Continent
        Cumulative Total Cases Per Continent as of March 9, 2023
        Total Population Per Continent

***************Results**************

Africa
        Total Cases: 12097198
        Total Population: 1295290295.3

Asia
        Total Cases: 208286326
        Total Population: 4544009064.0

Europe
        Total Cases: 247755428
        Total Population: 743618204.0

North America
```

In [ ]: