Document highlight:

- Setup Tableau Public
- Run MySQL queries (from data exploration query set), copy the results, and create excel files for each dataset (to be used as Tableau tables)
- In Tableau, load and work on the following:
    - Table 1 - Number of cases, deaths, and fatality rate (global)
    - Table 2 - Fatality rate compared to population (by continent)
    - Table 3 - Fatality rate (by country)
    - Table 4 - % infection rate compared to population (by country)
    - Table 5 - Population versus vaccinations (by country)
- Build the Tableau dashboard
- Tableau public link: https://public.tableau.com/app/profile/noel.lopez6438/viz/Covid-19TableauDashboard_17303378497140/Dashboard1?publish=yes

1. Setup Tableau (public)

Download and install (follow installation guide):
https://www.tableau.com/products/public/download

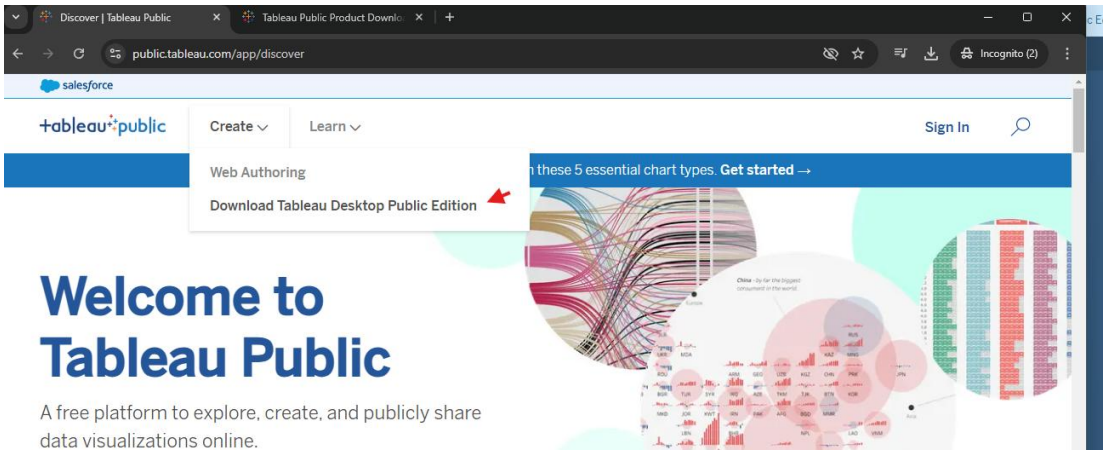
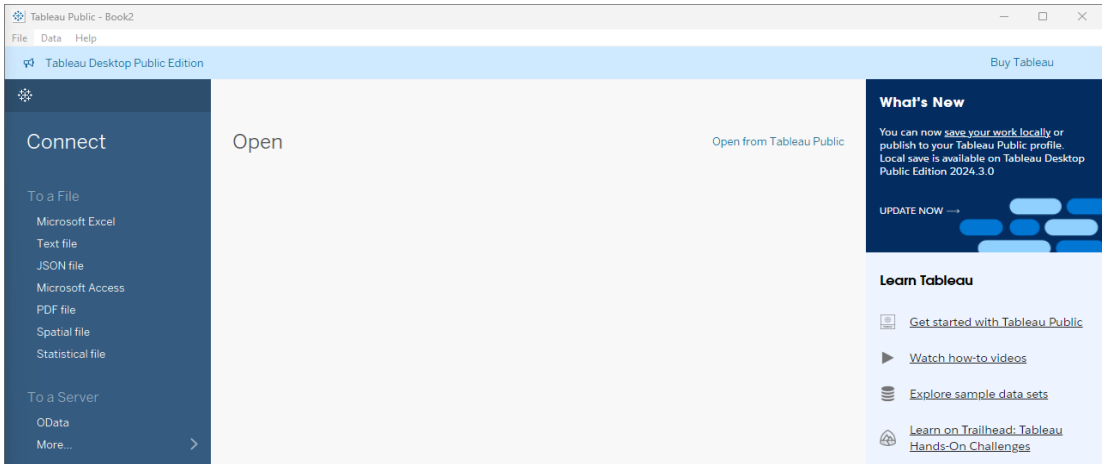


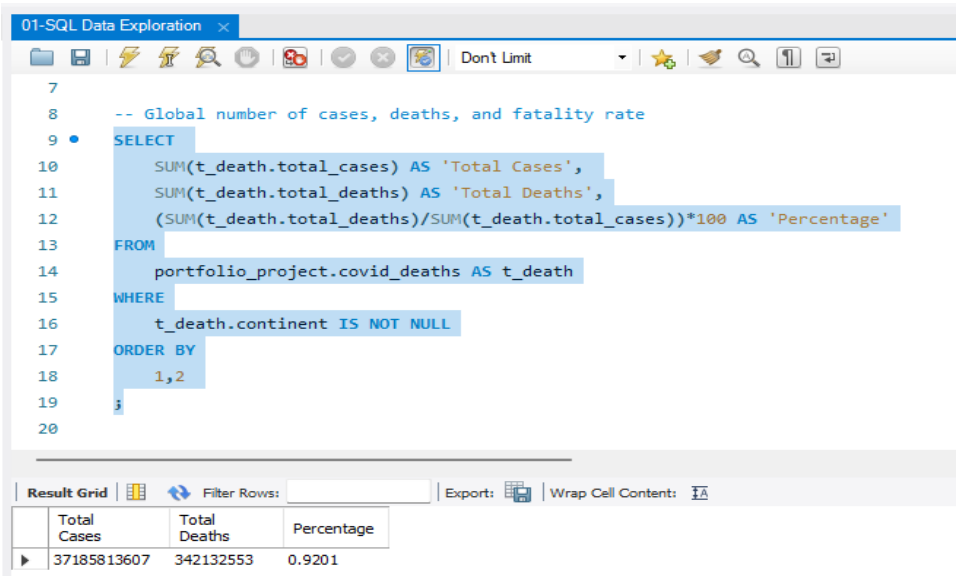
Tableau Public home screen (desktop)



2. Run MySQL queries (from data exploration query set), copy the results, and create excel files for each dataset (to be used as Tableau tables)

Table 1:

Number of cases, deaths, and fatality rate (global)



Excel:

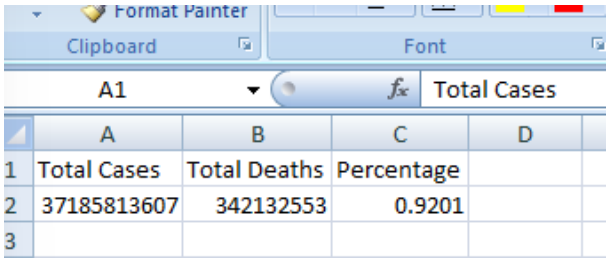
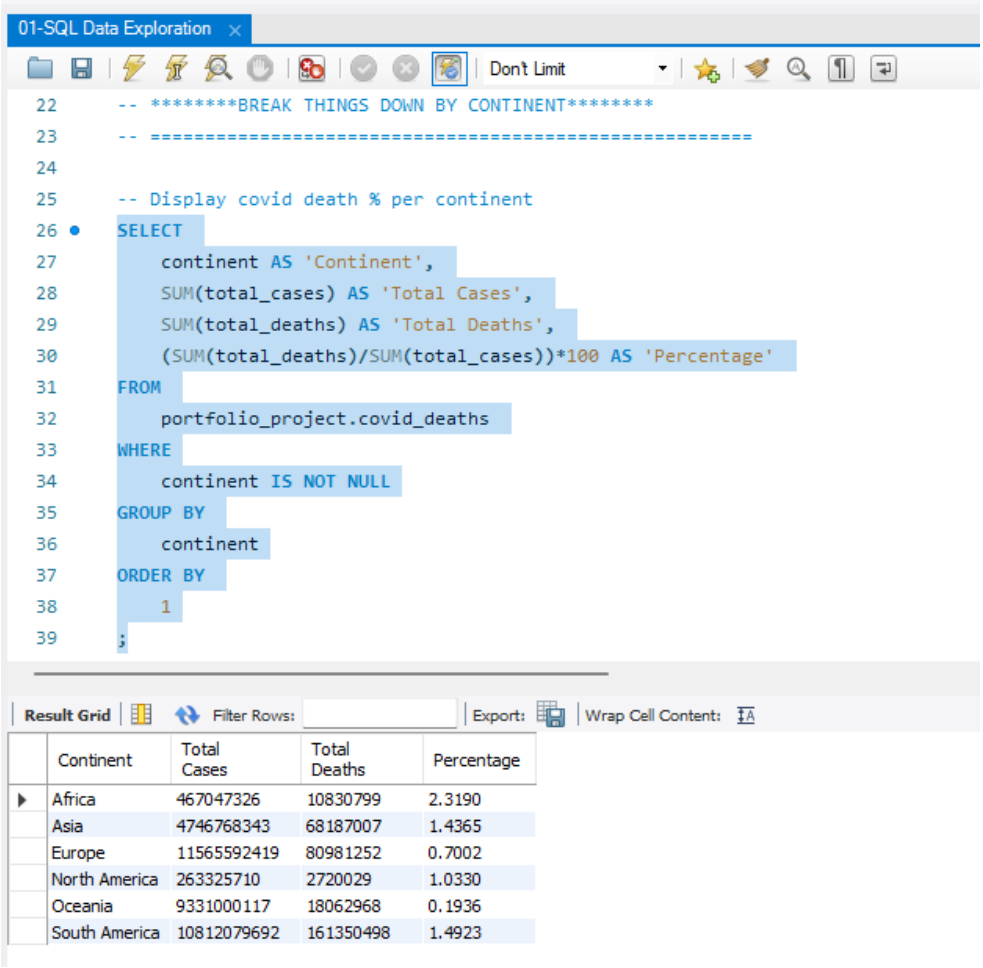


Table 2:

Fatality rate compared to population (by continent)



```
22  -- ********BREAK THINGS DOWN BY CONTINENT********
23  -- ======================================================
24
25  -- Display covid death % per continent
26  SELECT
27      continent AS 'Continent',
28      SUM(total_cases) AS 'Total Cases',
29      SUM(total_deaths) AS 'Total Deaths',
30      (SUM(total_deaths)/SUM(total_cases))*100 AS 'Percentage'
31  FROM
32      portfolio_project.covid_deaths
33  WHERE
34      continent IS NOT NULL
35  GROUP BY
36      continent
37  ORDER BY
38      1
39  ;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

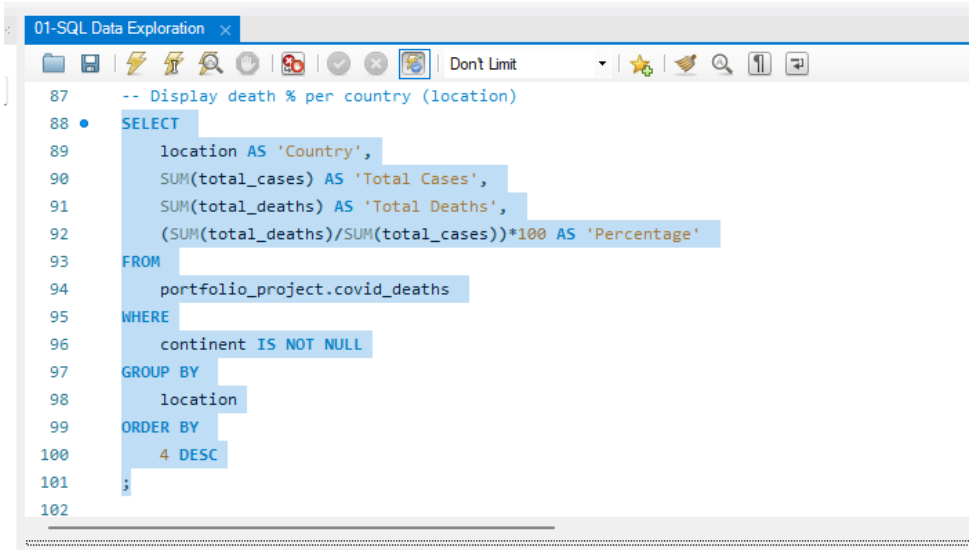
Continent	Total Cases	Total Deaths	Percentage
Africa	467047326	10830799	2.3190
Asia	4746768343	68187007	1.4365
Europe	11565592419	80981252	0.7002
North America	263325710	2720029	1.0330
Oceania	9331000117	18062968	0.1936
South America	10812079692	161350498	1.4923

Excel:

	A	B	C	D	E
1	**Continent**	**Total Cases**	**Total Deaths**	**Percentage**	
2	Africa	467047326	10830799	2.319	
3	Asia	4746768343	68187007	1.4365	
4	Europe	11565592419	80981252	0.7002	
5	North America	263325710	2720029	1.033	
6	Oceania	9331000117	18062968	0.1936	
7	South America	10812079692	161350498	1.4923	
8					

Table 3:

Fatality rate (by country)



Result Grid | Filter Rows: | Export: | Wrap Cell Content:

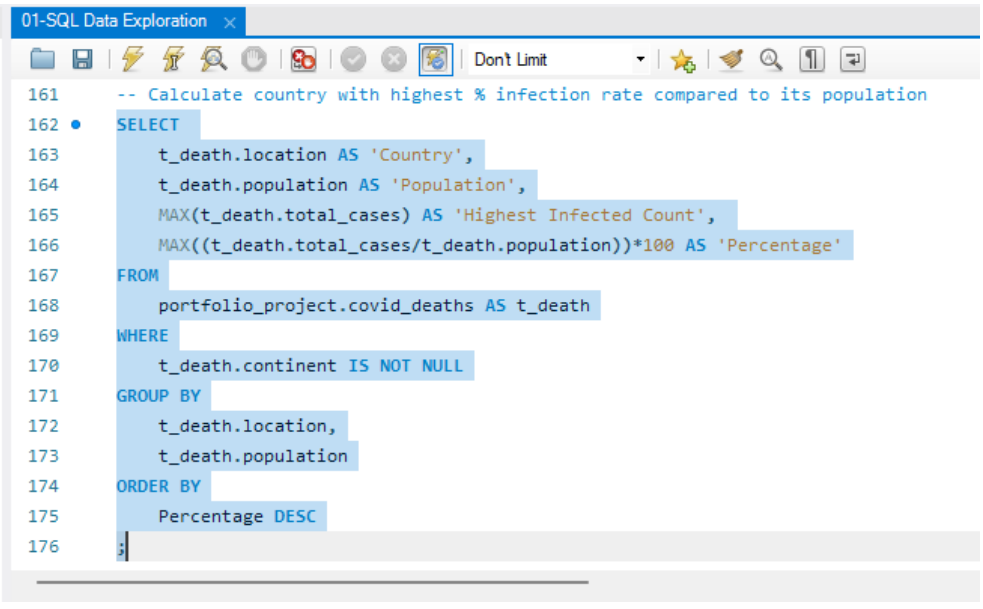
Country	Total Cases	Total Deaths	Percentage
Afghanistan	245988981	9482547	3.8549
Algeria	321430718	8409268	2.6162
Bermuda	167790	3808	2.2695
Bahamas	41028740	928279	2.2625
Armenia	515749237	10181877	1.9742
Angola	114441477	2219488	1.9394
Antigua and Barbuda	8957640	154832	1.7285
Bangladesh	2354357374	35158810	1.4934
Argentina	10812079692	161350498	1.4923
Azerbaijan	918519664	11514202	1.2536
Albania	355635062	4320183	1.2148
Belize	70481110	790792	1.1220
Belgium	4751573368	43290916	0.9111
Belarus	1100835696	7985375	0.7254
Aruba	44492474	295867	0.6650
Benin	31175131	202043	0.6481
Barbados	94625816	535680	0.5661
Austria	5308511352	25176950	0.4743
Andorra	49036941	207828	0.4238
American Samoa	6894077	28209	0.4092
Anguilla	3572140	10771	0.3015
Bahrain	712153087	1849571	0.2597
Australia	9324106040	18034759	0.1934

Excel:

	A	B	C	D	E	F	G
1	Country	Total Cases	Total Deaths	Percentage			
2	Afghanistan	245988981	9482547	3.8549			
3	Algeria	321430718	8409268	2.6162			
4	Bermuda	167790	3808	2.2695			
5	Bahamas	41028740	928279	2.2625			
6	Armenia	515749237	10181877	1.9742			
7	Angola	114441477	2219488	1.9394			
8	Antigua and Barbuda	8957640	154832	1.7285			
9	Bangladesh	2354357374	35158810	1.4934			
10	Argentina	10812079692	161350498	1.4923			
11	Azerbaijan	918519664	11514202	1.2536			
12	Albania	355635062	4320183	1.2148			
13	Belize	70481110	790792	1.122			
14	Belgium	4751573368	43290916	0.9111			
15	Belarus	1100835696	7985375	0.7254			
16	Aruba	44492474	295867	0.665			
17	Benin	31175131	202043	0.6481			
18	Barbados	94625816	535680	0.5661			
19	Austria	5308511352	25176950	0.4743			
20	Andorra	49036941	207828	0.4238			
21	American Samoa	6894077	28209	0.4092			
22	Anguilla	3572140	10771	0.3015			
23	Bahrain	712153087	1849571	0.2597			
24	Australia	9324106040	18034759	0.1934			
25							

Table 4:

% infection rate compared to population (by country)



Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Country	Population	Highest Infected Count	Percentage
Austria	8939617	6082444	68.0400
Andorra	79843	48015	60.1400
Bahrain	1472237	696614	47.3200
Australia	26177410	11861161	45.3100
Belgium	11655923	4872829	41.8100
Aruba	106459	44224	41.5400
Barbados	281646	108582	38.5500
Anguilla	15877	3904	24.5900
Argentina	45510324	10101218	22.2000
American Samoa	44295	8359	18.8700
Belize	405285	71414	17.6200
Armenia	2780472	452273	16.2700
Albania	2842318	335047	11.7900
Belarus	9534956	994037	10.4300
Antigua and Ba...	93772	9106	9.7100
Bahamas	409989	39127	9.5400
Azerbaijan	10358078	835757	8.0700
Bermuda	64207	2315	3.6100
Bangladesh	171186368	2051348	1.2000
Algeria	44903228	272139	0.6100
Afghanistan	41128772	235214	0.5700
Angola	35588996	107481	0.3000
Benin	13352864	28036	0.2100

Excel:

A1 | Country

	A	B	C	D	E	F	G
1	**Country**	**Population**	**Highest Infected Count**	**Percentage**			
2	Austria	8939617	6082444	68.04			
3	Andorra	79843	48015	60.14			
4	Bahrain	1472237	696614	47.32			
5	Australia	26177410	11861161	45.31			
6	Belgium	11655923	4872829	41.81			
7	Aruba	106459	44224	41.54			
8	Barbados	281646	108582	38.55			
9	Anguilla	15877	3904	24.59			
10	Argentina	45510324	10101218	22.2			
11	American Samoa	44295	8359	18.87			
12	Belize	405285	71414	17.62			
13	Armenia	2780472	452273	16.27			
14	Albania	2842318	335047	11.79			
15	Belarus	9534956	994037	10.43			
16	Antigua and Barbuda	93772	9106	9.71			
17	Bahamas	409989	39127	9.54			
18	Azerbaijan	10358078	835757	8.07			
19	Bermuda	64207	2315	3.61			
20	Bangladesh	171186368	2051348	1.2			
21	Algeria	44903228	272139	0.61			
22	Afghanistan	41128772	235214	0.57			
23	Angola	35588996	107481	0.3			
24	Benin	13352864	28036	0.21			
25							

Table 5:

Population versus vaccinations (by country)

01-SQL Data Exploration

```
199  -- Total population vs vaccinations
200  SELECT
201      t_death.continent AS 'Continent',
202      t_death.location AS 'Location',
203      t_death.date AS 'Date',
204      t_death.population AS 'Population',
205      t_vacc.new_vaccinations AS 'New Vaccination'
206  FROM
207      portfolio_project.covid_deaths AS t_death
208      JOIN
209          portfolio_project.covid_vaccinations AS t_vacc
210  ON
211      t_death.location = t_vacc.location
212      AND
213          t_death.date= t_vacc.date
214  WHERE
215      t_death.continent IS NOT NULL
216      AND
217          t_vacc.new_vaccinations IS NOT NULL
218  ORDER BY
219      2,3
220  ;
```

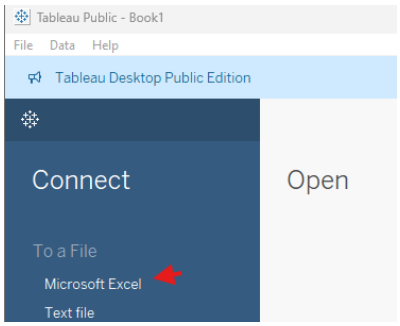
Result Grid | Filter Rows: | Export: | Wrap Cell Content: | Fetch rows:

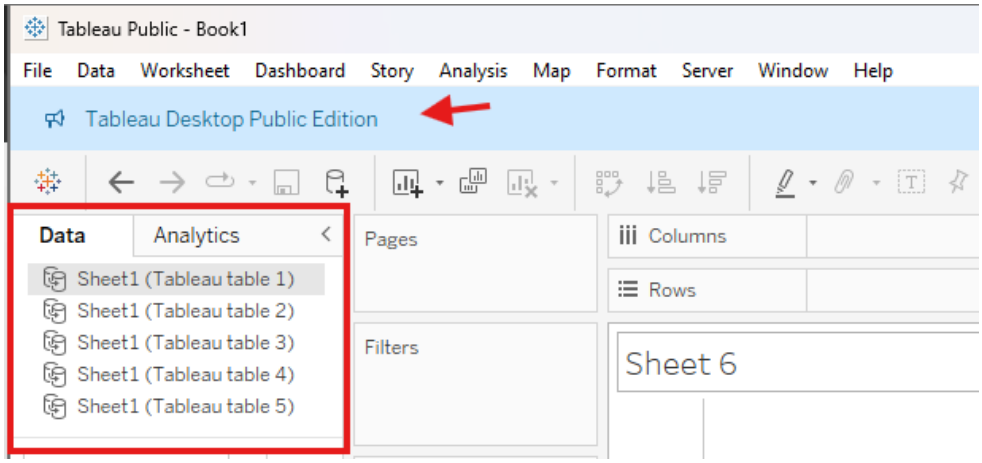
Continent	Location	Date	Population	New Vaccination
Asia	Afghanistan	2021-05-27	41128772	2859
Asia	Afghanistan	2021-06-03	41128772	4015
Asia	Afghanistan	2022-01-27	41128772	6868
Asia	Afghanistan	2022-04-27	41128772	383
Asia	Afghanistan	2022-09-12	41128772	9447
Asia	Afghanistan	2022-11-02	41128772	36587
Asia	Afghanistan	2022-11-16	41128772	14800
Asia	Afghanistan	2023-04-25	41128772	3316
Europe	Albania	2021-01-13	2842318	60
Europe	Albania	2021-01-14	2842318	78
Europe	Albania	2021-01-15	2842318	42
Europe	Albania	2021-01-16	2842318	61

Excel:

	A	B	C	D	E	F
	Continent	**Location**	**Date**	**Population**	**New Vaccination**	
2	Asia	Afghanistan	2021-05-27	41128772	2859	
3	Asia	Afghanistan	2021-06-03	41128772	4015	
4	Asia	Afghanistan	2022-01-27	41128772	6868	
5	Asia	Afghanistan	2022-04-27	41128772	383	
6	Asia	Afghanistan	2022-09-12	41128772	9447	
7	Asia	Afghanistan	2022-11-02	41128772	36587	
8	Asia	Afghanistan	2022-11-16	41128772	14800	
9	Asia	Afghanistan	2023-04-25	41128772	3316	
10	Europe	Albania	2021-01-13	2842318	60	
11	Europe	Albania	2021-01-14	2842318	78	
12	Europe	Albania	2021-01-15	2842318	42	
13	Europe	Albania	2021-01-16	2842318	61	
14	Europe	Albania	2021-01-17	2842318	36	
15	Europe	Albania	2021-01-18	2842318	42	

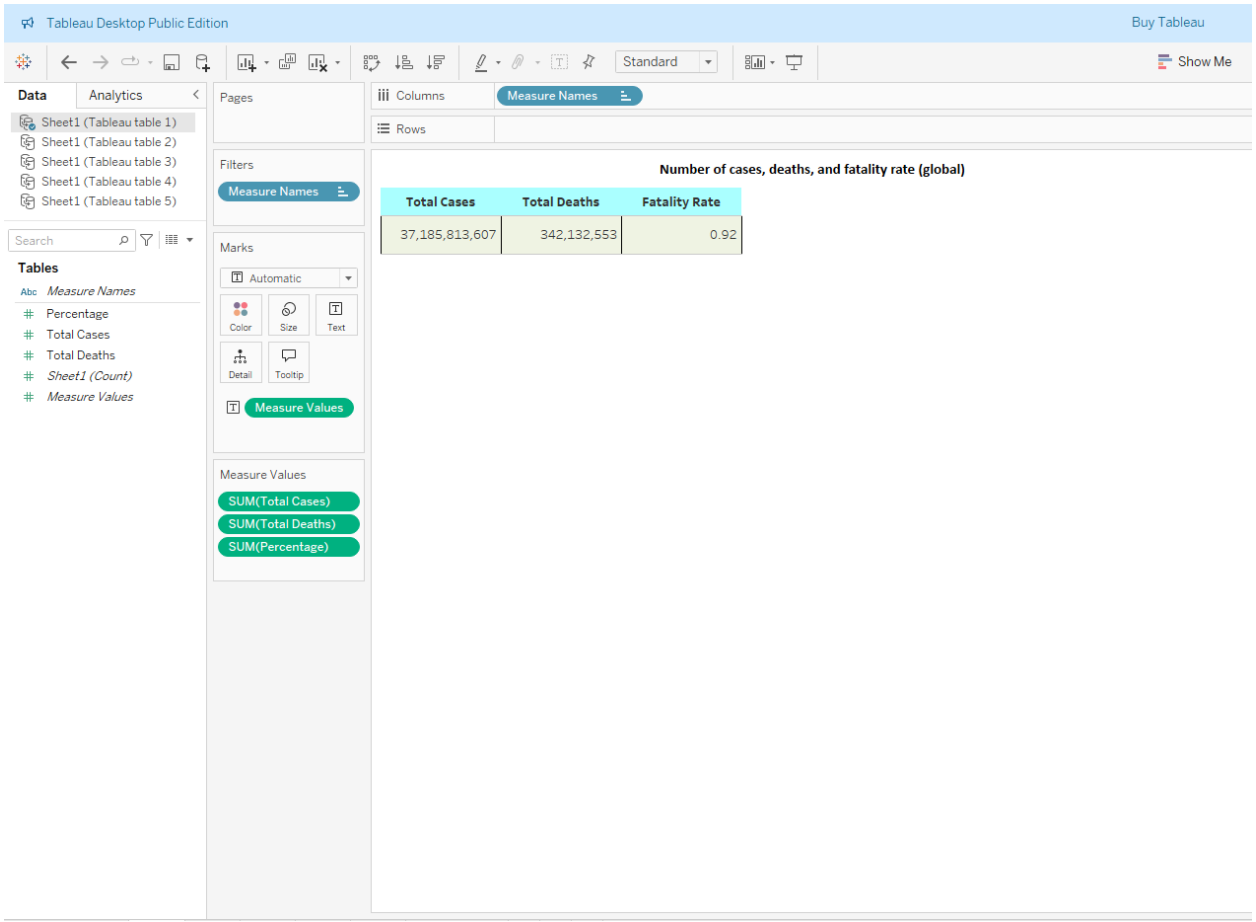
3. In Tableau, open a new Tableau and load the excel (table) files





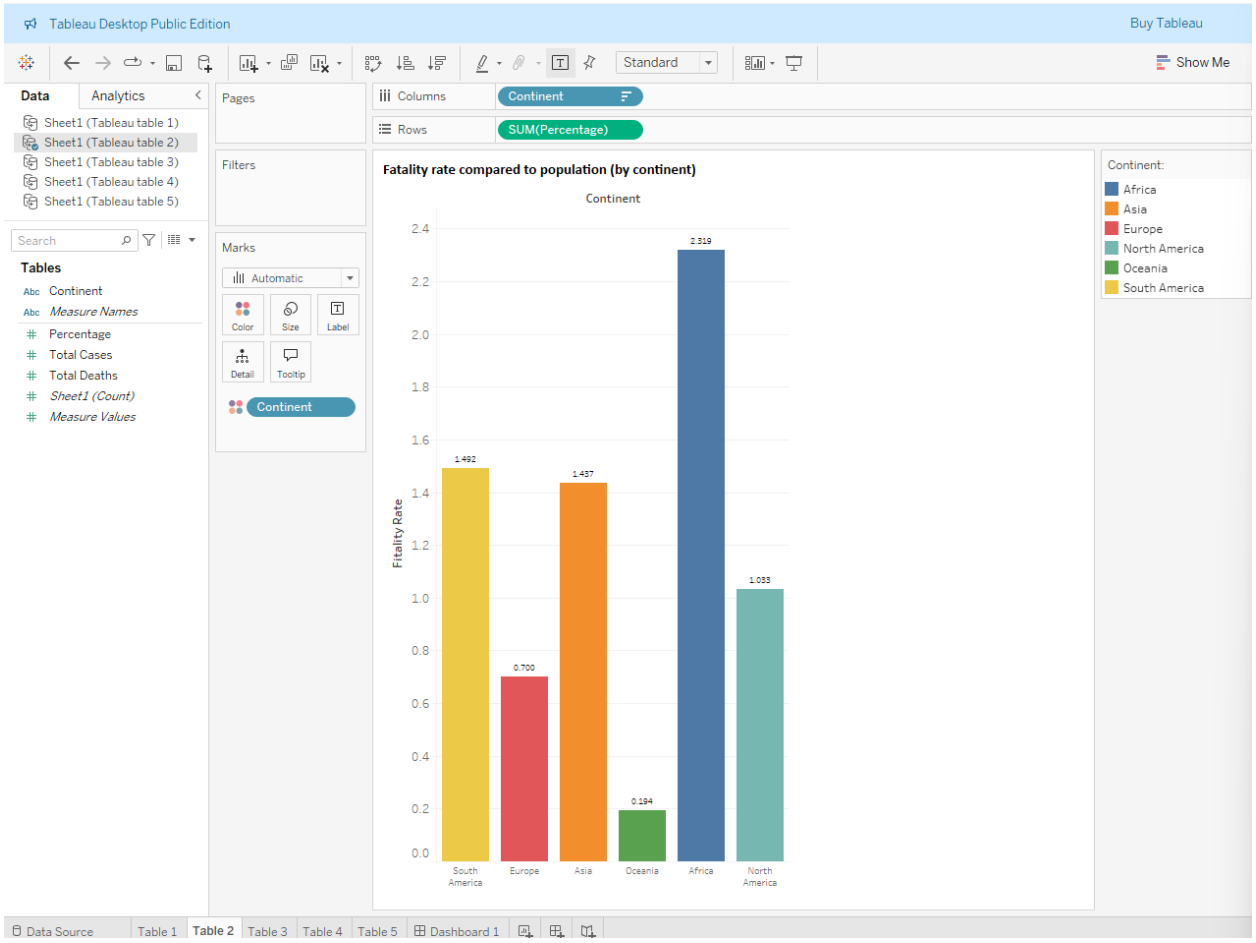
4. Load and work on Table 1 display

Number of cases, deaths, and fatality rate (global)



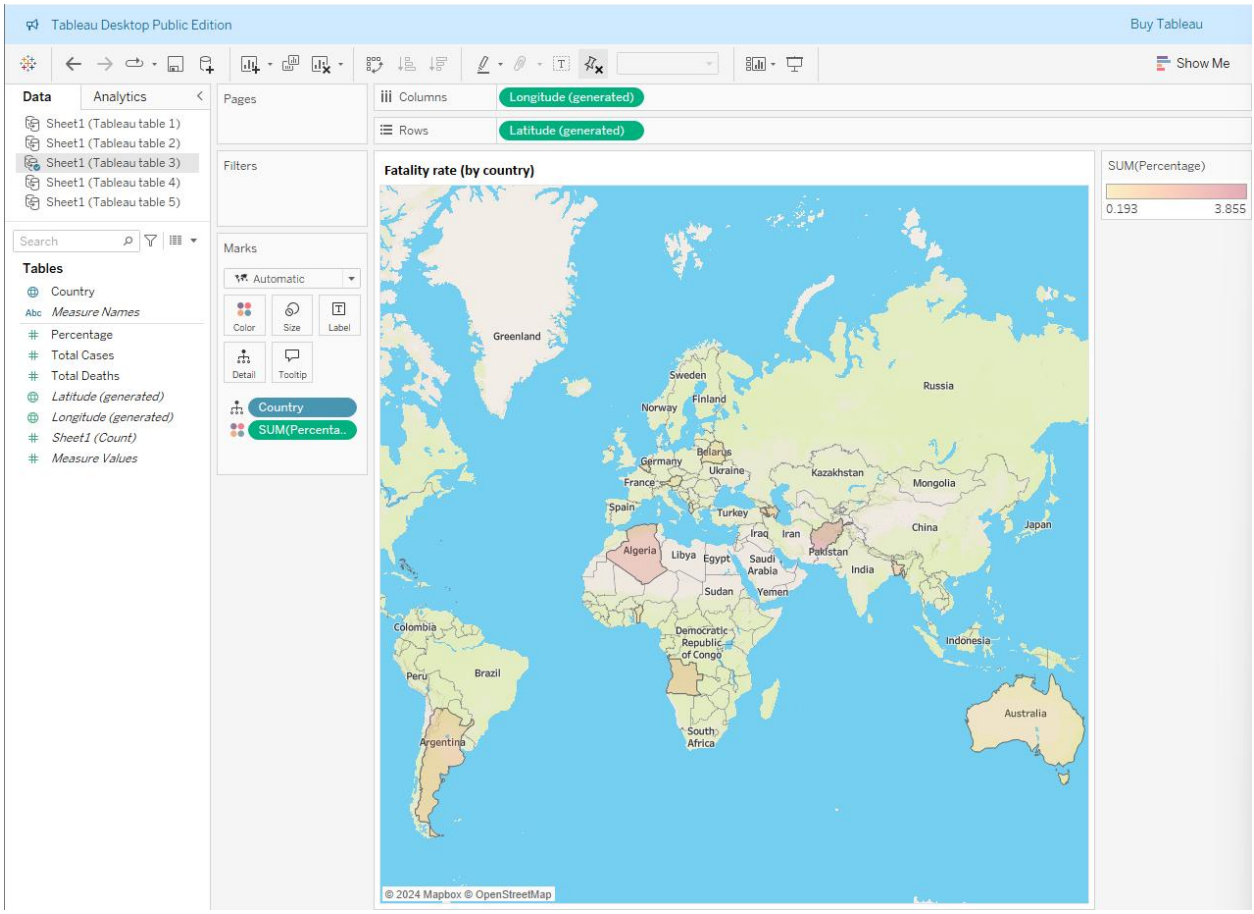
5. Load and work on Table 2 display

Fatality rate compared to population (by continent)



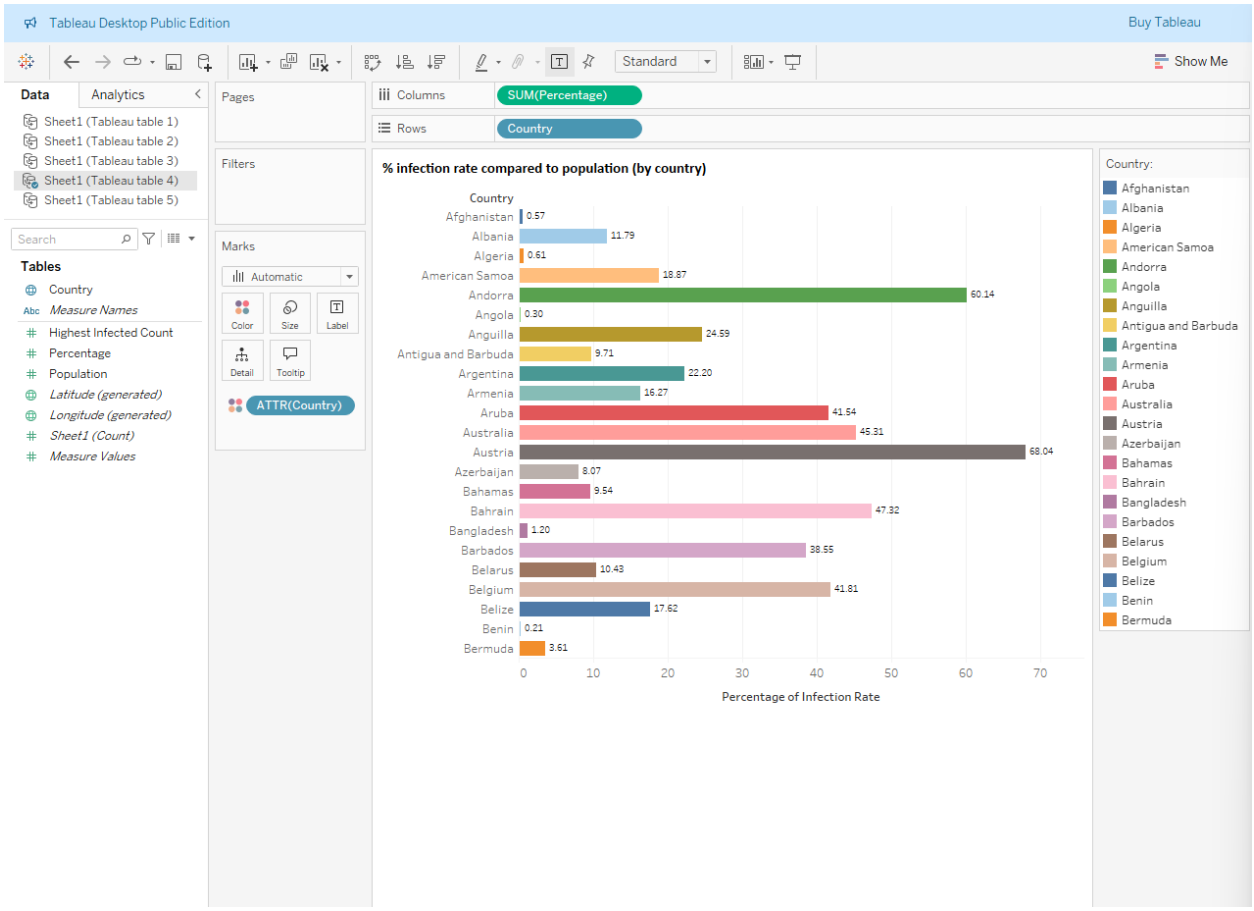
6. Load and work on Table 3 display

Fatality rate (by country)



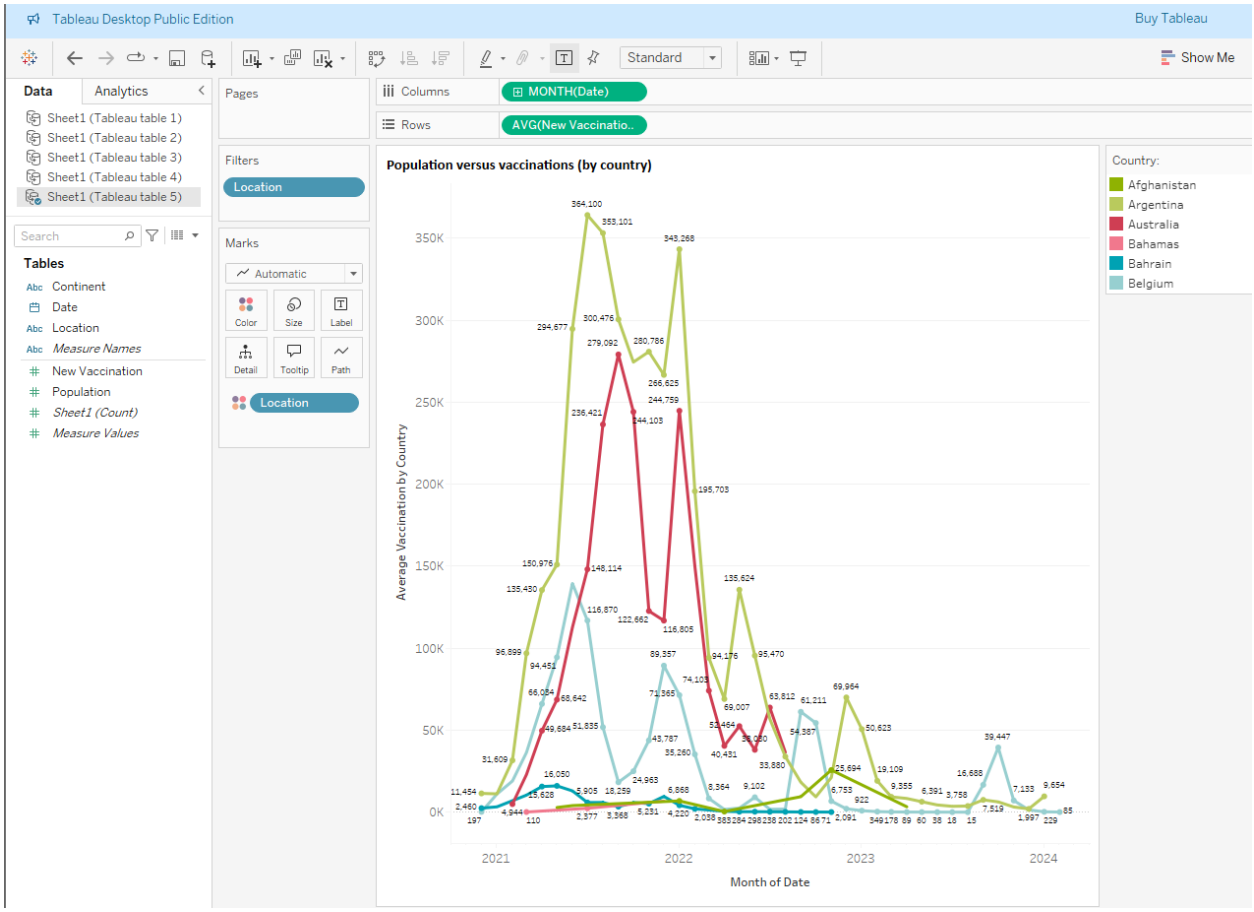
7. Load and work on Table 4 display

% infection rate compared to population (by country)



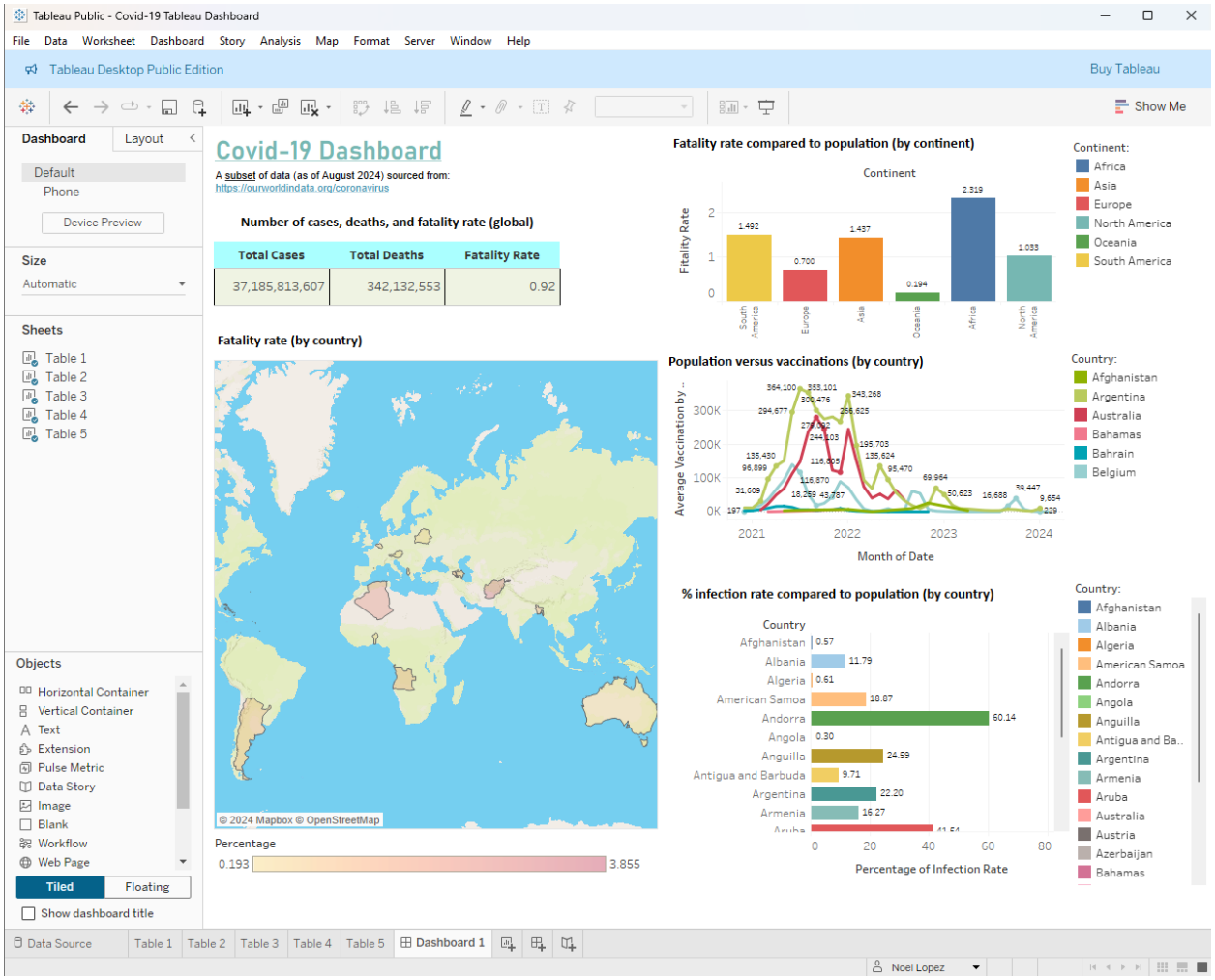
8. Load and work on Table 5 display

Population versus vaccinations (by country)

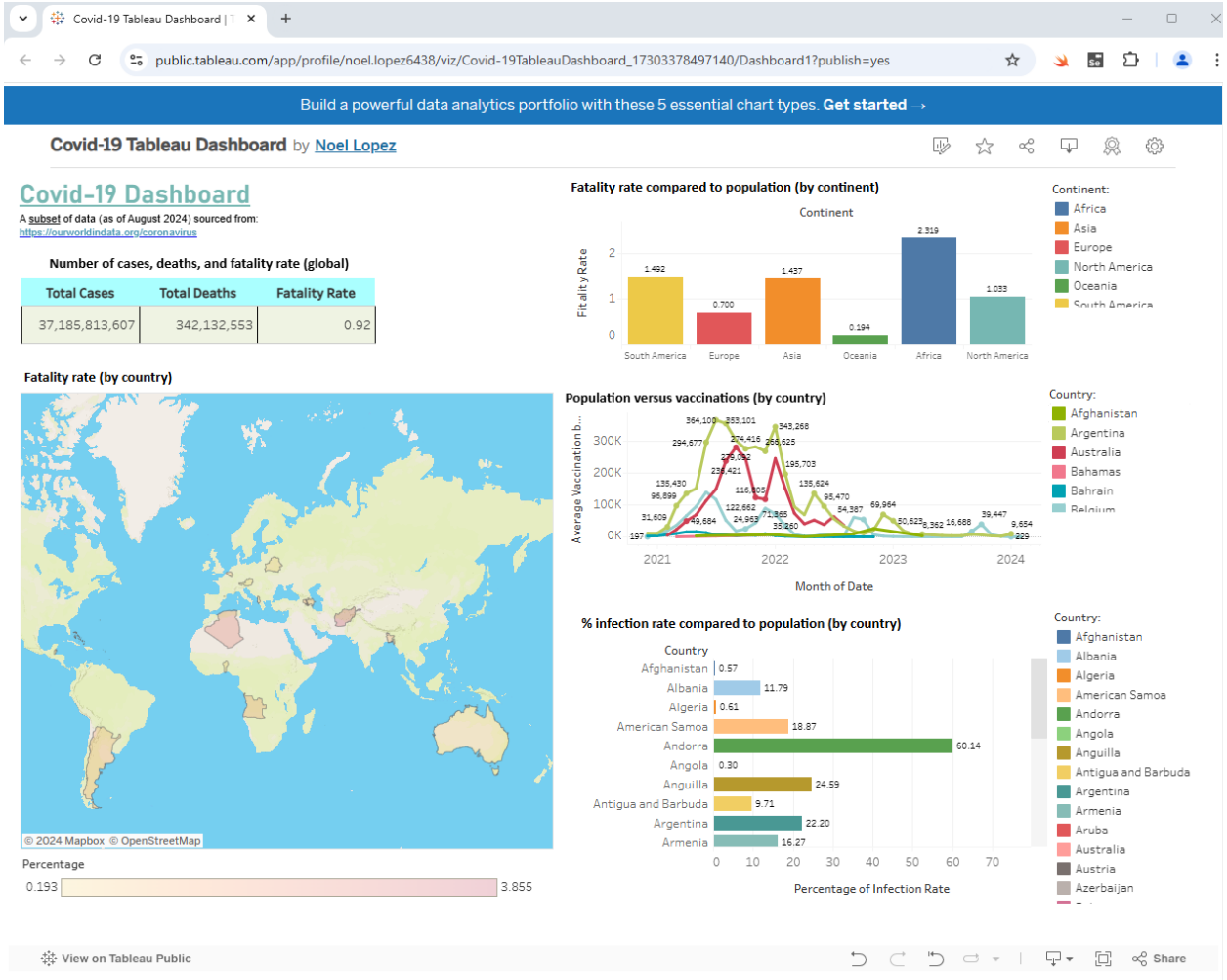


9. Build the Tableau dashboard

Layout the tables on the Tableau dashboard



After publishing, the dashboard goes live (public):
https://public.tableau.com/app/profile/noel.lopez6438/viz/Covid-19TableauDashboard_17303378497140/Dashboard1?publish=yes



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