HACKS for Project 1 for Covid Visual Analysis:

DATA you need – USE latest from BB.

1. The "Covid Protection Efficacy by Vaccine Type.xlsx" has the vaccine efficacy data. IMPORATNT- It's an image and not a real spreadsheet. You must read and write while copying values. Cut and paste will NOT work. Note not all vaccines listed in s/s 2 are listed here. Columns to be used are A for Vaccine Type, E, F, K, L, M and N for the efficacy data. Note that values for Ancestral and Alpha are same, Values for Beta, Gamma and Delta are same and finally BA.1/A.2 (aka omicron) and BA.5 are same. We'll consider Ancestral as the Original var of Covid and the BA.1/A.2/A.5 as the latest variant- Omicron. You'll be using the data for ancestral and omicron var only for your work. You can add Delta as well if you want better marks.
2. The "vaccination-data-WHO-12-28-2022-NO-DETAILS for-vaccinetype-date.xlsx" has Country and the types of vaccines used for each country. Columns to be used are A for Country, C for WHO_Region, E for DATE_UPDATED, L for Vaccine_Used and N for count of types of vaccines.
3. The "owid-covid-data-ALL-COUNTRIES.xlsx" has the Country, people vaccinated and total population data. Columns you need are B for continent, C for Country (labeled as location), D for date, F for People vaccinated and L for Population.
4. There is a spreadsheet in BB as "Covid Protection Efficacy By Country - Averaged Out.XLSX". Fill up the columns G, H, I, J using the formulae as shown in example – Argentina has used these vaccine types. The values shown in in parentheses below are for Ancestral/original(severe), Ancestral/original(infection), Omicron (severe), Omicron (Infection),
    a. AstraZeneca - Vaxzevria, - Use data for AstraZeneca (94, 63, 71, 36)
    b. Beijing CNBG - BBIBP-CorV aka SinoPharm - (73, 68, 53, 35)
    c. CanSino - Convidecia, - Use data for CanSino (66, 62, 48, 32)
    d. Gamaleya - Gam-Covid-Vac aka Sputnik-V (92, 86. 67, 44)
    e. Moderna - Spikevax, (97, 92, 73, 48)
    f. Pfizer BioNTech - Comirnaty, (95, 86, 73, 48)
    g. SII – Covishield (this is Astra Zeneca made in India) - (94, 63, 71, 36)
    h. So, the avg efficacy is Ancestral/original(severe) = (94+73+66+ 92+ 97+ 95+ 94)/7 or 87%; Ancestral/original(infection) =

(63+68+62+86+92+86+63)/7 = 74% ; Omicron (severe) =(71+53+48+67+73+73+71)/7 = 65%; Omicron (Infection)= (36+35+32+44+48+48+36)/7 = 40%

5. I've filled up data for many countries for step 4. Rest you can fill up. I'm here to help . There are 192 blank rows. There are 30 of you. Each student should fill up 6 rows. That's 180. I'll take care of the rest. Let's put a group effort.
6. Fill in the blank columns "Covid Protection Efficacy By Country - Averaged Out.XLSX" as follows:
    a. For Col K fill population data from sl# 3 for each country
    b. For Col L fill People vaccinated data from sl# 3 for each country
    c. For Col M use the formula (L/K)*100 for % of people vaccinated
    d. For Col N use the formula (M*G)/100
    e. For Col O use the formula (M*H/100
    f. For Col P use the formula (M*I)/100
    g. For Col Q use the formula (M*J)/100
7. ONCE DONE- start on creating Visuals with the Breakthrough Infection data.
8. Create as many different visuals you can to demonstrate your prowess.

NOTE- For Countries with No data for vaccine types – NEGLECT these countries for the Analysis. Write a Note in your story saying that these countries do not have data.