Name: Muhammad Adeel Riasat

Data Sources:

- https://www.cryptodatadownload.com/data/cexio/
- https://www.data.gov.uk/dataset/44864962-e4ad-46e6-8f10-71b40126cefb/higher-education-student-data
- https://data.worldbank.org/indicator/IT.CEL.SETS.P2?locations=XO-XM-XJ&name_desc=false

Github Repo Link:

- https://github.com/adeelriasat/ads-assignment-1
- Data Link -> https://github.com/adeelriasat/data-ads-1

Visualization 1: CEX.IO Crypto Exchange OHLC (Open/High/Low/Close) Price Data from 21/04/2021 to 03/03/2023 on Daily Basis

Line graph are good choice for displaying crypto prices on daily basis because it shows the overall trend of prices over time in a clear and easy-to-understand way.

For better visualization I have shown the data of first 50 rows from 15/12/2022 to 03/03/2023. It can be seen from the graph that OHLC prices are same close to 60 from start of the graph. As the days pass the prices are going high. We can see that low and high prices are close to 90 on the 01/15/2023 closing price is below 70 and opening price is between 80 and 90. It means that at this point crypto sold on high price than the opening price. Overall this graph show that closing prices are mostly below from the opening but at some period of the day prices are gone high and low for each day.

Visualization 2: Student Enrollment for Academic Year 2014/15 and Year

CEX Exchange Data (CEXIO) on Daily Basis
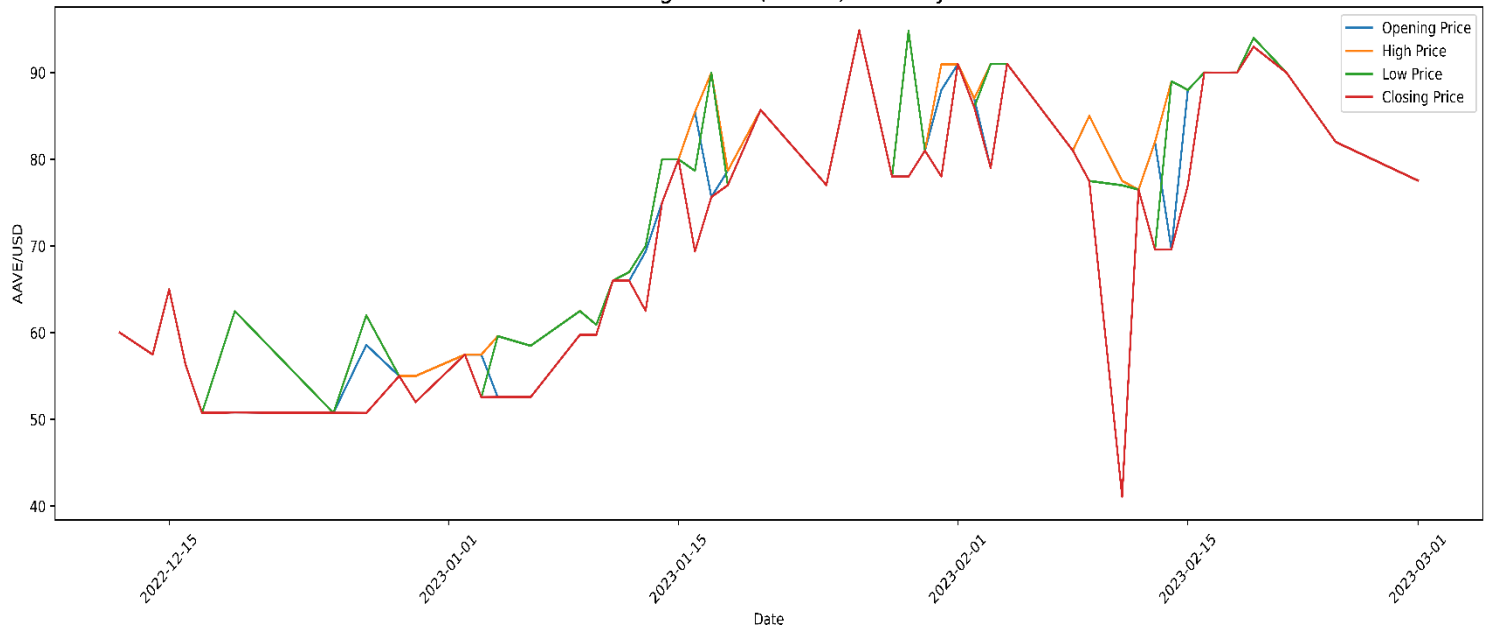
2021/22

Reason for Using Bar Graph:

A bar graph is a good choice for showing student enrollment for academic year by region because it allows viewers to easily compare the enrollment numbers for each region side by side. Also it is easy to understand when you want to compare the length of the bar in the graph shows the number of student enrolled in each region. Bar in the graph can easily be compared to one another in the graph making it simple that from area student enrolled more.

Explanation:

From the first graph it can be seen that in year 2021-22 there were more than 6000 students enrolled in full time and below 4000 in part time and overall student enrolled are above 6000 and close to 10000.

In the second graph it can be seen that above 8000 student are enrolled from United Kingdom and Scotland is on second number. We can see that from other countries there are less than 1000 Student enrolled in year 2021-22.

Student Enrollment Record 2021-22
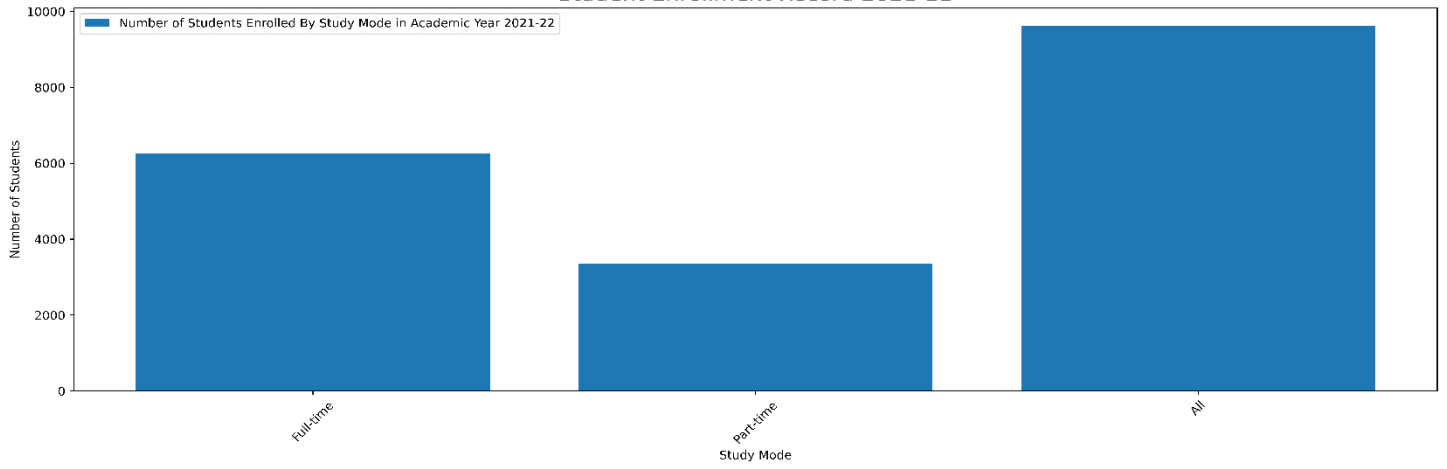
Student Enrollment Record 2014-15
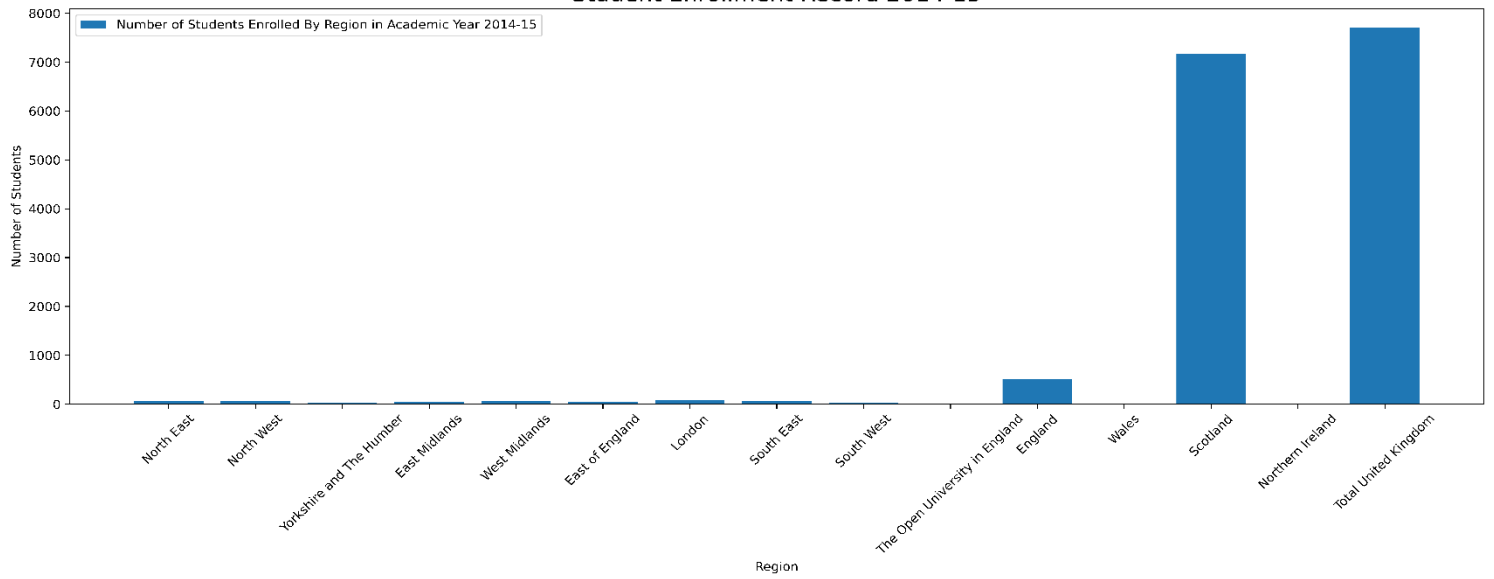
Visualization 3: Mobile Cellular Subscription By Region For 2010 and 2020
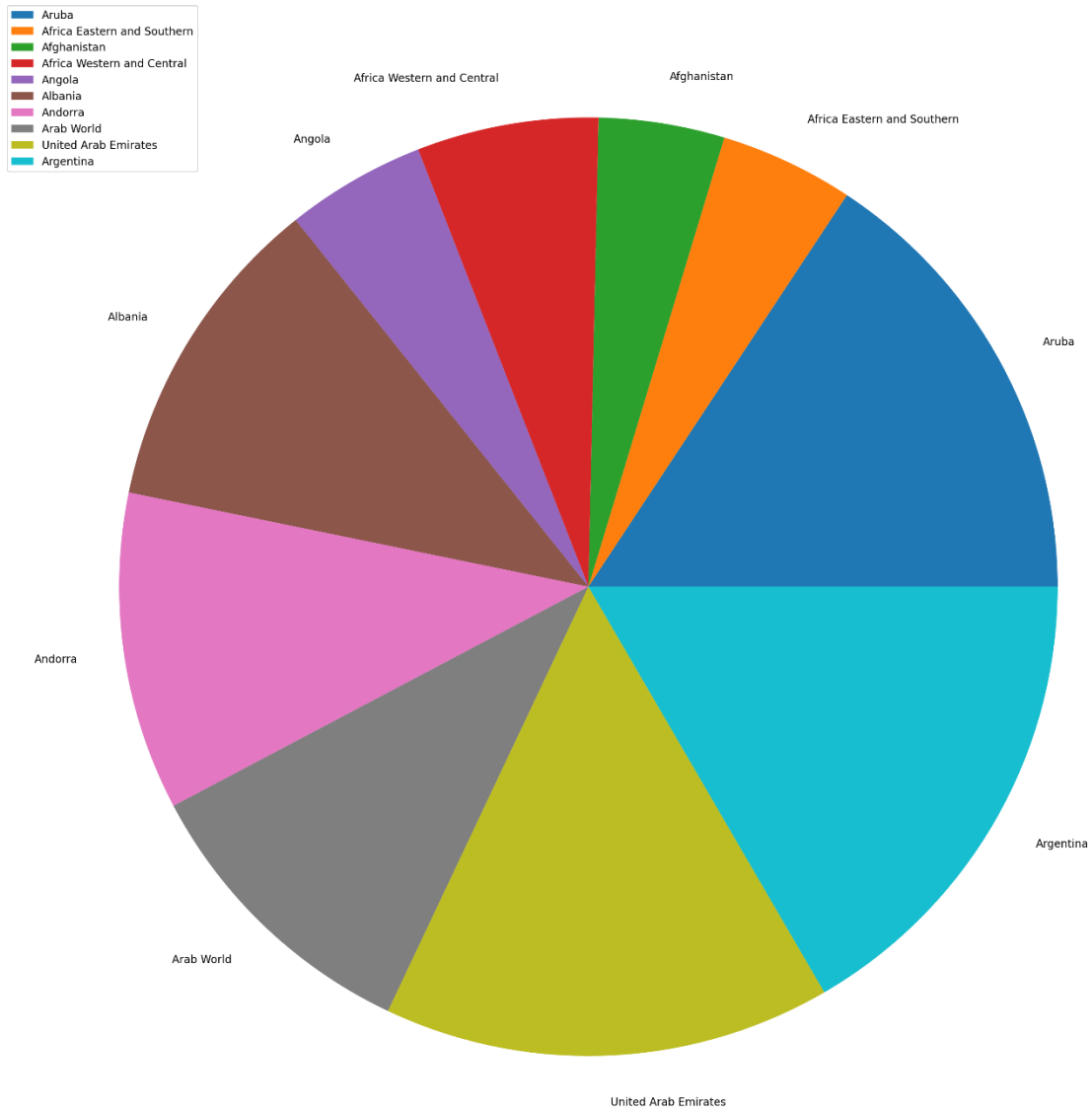
Reason for Using Pie Graph:

Pie graph are commonly used to display the distribution of a single variable across different categories. In the case of mobile cellular subscription by region, a pie graph can effectively show the proportion of mobile cellular subscriptions in each region. From pie graph we can easily compare the data for two years by just looking at the portion of the region. One can easily understand the change in the size of slice by looking at the graph. Also if you want to see for one year you can see which slice is bigger by just looking at the graph.

Explanation:

From the 2010 graph we can see that Argentina and UAE have more cellular subscription per 100 people than any other country. It can be seen that 4 countries (Angola, Africa Western and Central, Afghanistan, Africa Eastern and Southern) have low cellular subscription per 100 people than other countries.

From the graph 2020 it can be seen that there is increase in cellular subscription in the countries (Angola, Africa Western and Central, Afghanistan, Africa Eastern and Southern). It implies that people from these countries has started using more cellular subscription over the years.

Mobile Cellular Subscriptions By Region (per 100 people) - 2010

Legend:
- Aruba
- Africa Eastern and Southern
- Afghanistan
- Africa Western and Central
- Angola
- Albania
- Andorra
- Arab World
- United Arab Emirates
- Argentina

Mobile Cellular Subscriptions By Region (per 100 people) - 2020