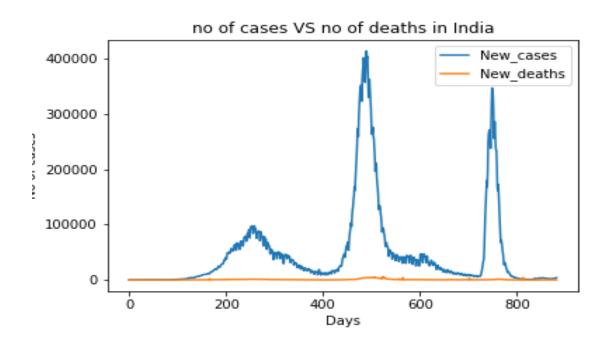
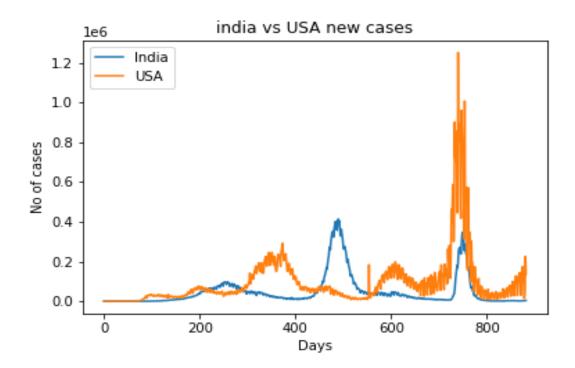
## Part1:Covid 19 world dataset:

Q1) compare the variation of cases in INDIA: ANS:



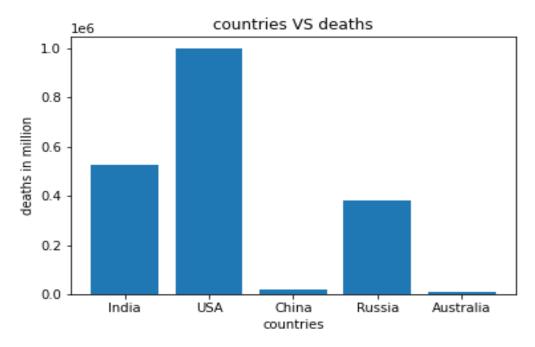
From the above plot we can see the variation of new cases in India over a time. We can see three peaks in cases that imply that there were three waves of covid 19 in india. In the 2nd wave there is a very high peak of cases followed by the third and first wave. New deaths are almost constant variation.

## Q2) Compare variation of cases in india and USA: ANS:



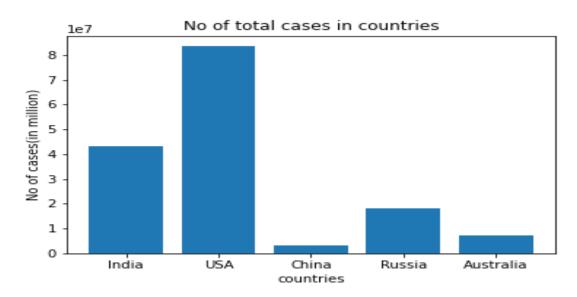
The above plot shows number of cases in millions vs days data of India and USA. Here we can see there were three waves of covid in the USA. The time of the third wave in India and the USA is the same but for the USA it was very huge.

Q3) compare the total deaths in INDIA, USA, China, Russia and Australia:



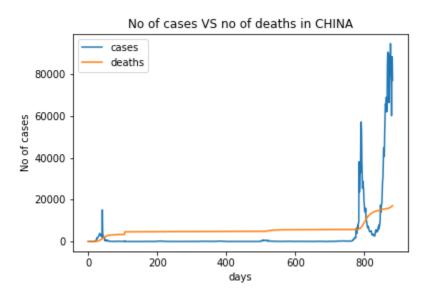
Above bar plot shows total deaths in India,USA,China,Russia,Australia till now in millions. We can see there were the highest number of deaths in the USA followed by India then China and australia. The USA had almost twice as many deaths as India and Russia.

Q4)compare Total cases in above countries: Ans:

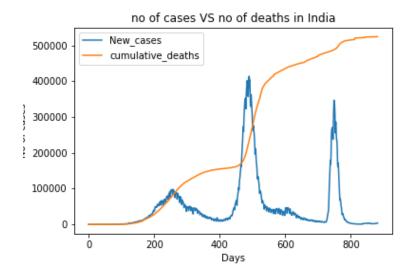


From the above plot it is very clear that highest cases were observed in the USA which are almost twice as high as India and the least cases were found in china!! Cases recorded in russia were more than twice as in Australia and cases in india are as twice as in russia.

Q5) Compare the cases and total deaths in CHINA and INDIA: ANS:



Above plot shows the new cases from the data of new cases we get to know about the wave in the pandemic. After the 2nd and 3rd wave in China we can see the increase in the total deaths significantly.

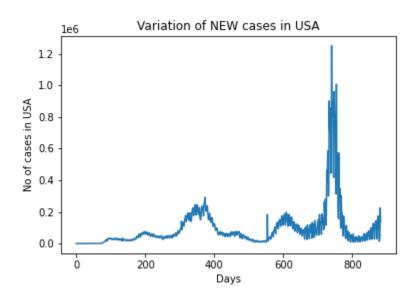


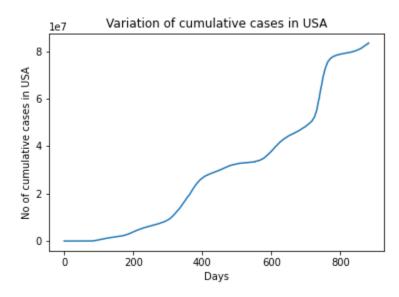
While in India we can see the cumulative deaths are much higher than China after all the three waves of pandemic.

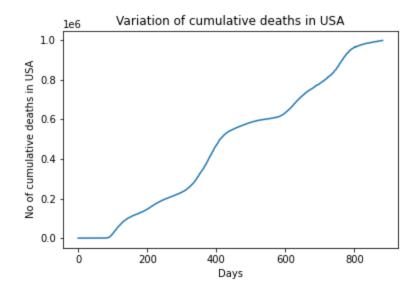
Q6)Find the country of which WHO region which has highest deaths in the world and plot its variation of cases and deaths:

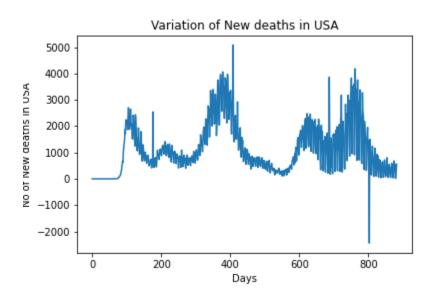
ANS:

Among the given data 237 countries, the United States of America(USA) have recorded the highest number of deaths in the WHO region AMRO. following are the variation of cases and deaths over time:



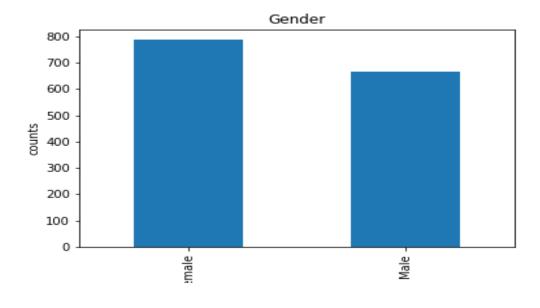


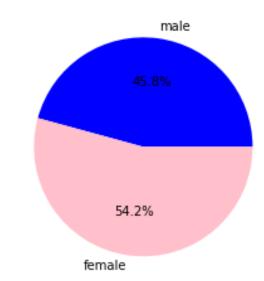




## **PART1** foodmart dataset:

Q1) Compare how many male and females visiting the shop:

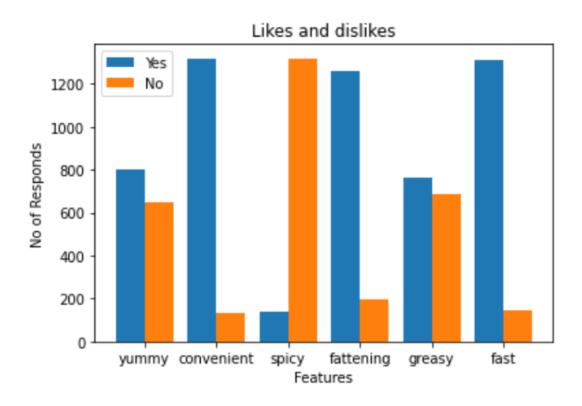




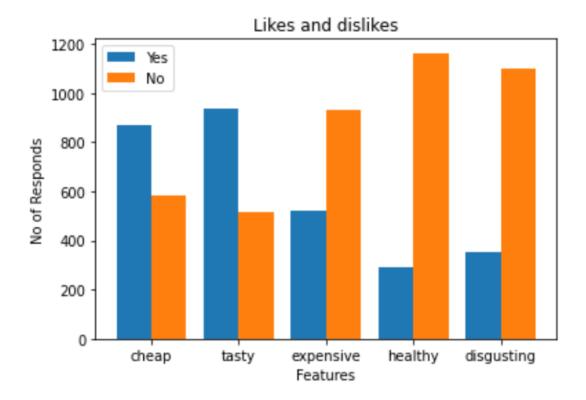
From the above bar and pie chart we can easily see that there are slightly more female visitors than males among the total visitors there are 54.2% are female and 45.8% are male visitors.

Q2) compare the review given by visitors about the food served in restaurant:

Ans:-



From the above bar plot the majority of people think the food is yummy, convenient and not much spicy but fattening, greasy and fast. So from the above data we get insight about the food and likings of people.

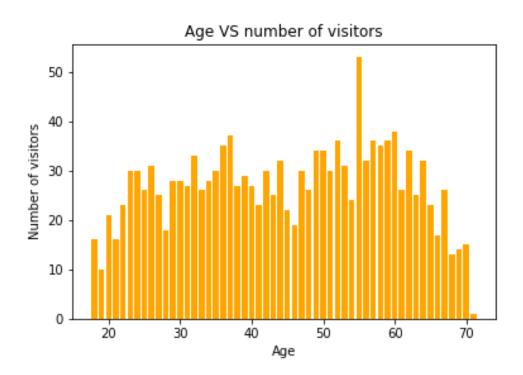


From the above figure in which we compared the features such as what people think about the food like its cheap or expensive, tasty or disgusting, healthy or not.

So from above plotted bar graph we can conclude some following remarks:

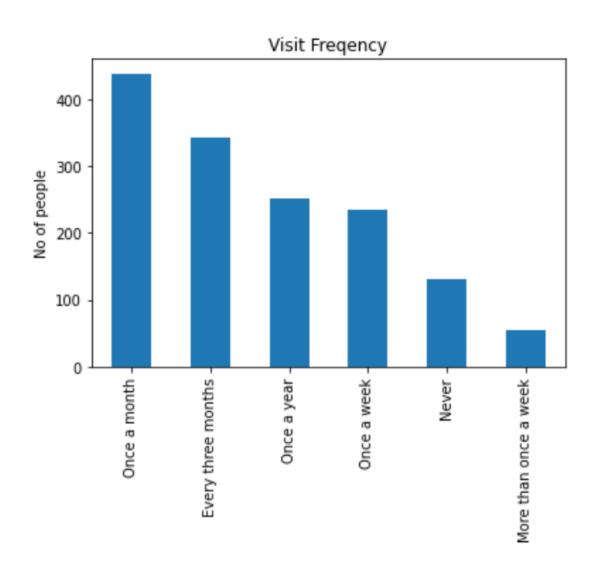
- 1) Majority people think that cost is not so expensive so current cost is not bad
- 2) Majority people think food is tasty but almost half of the people think its not tasty so test can be improved more.
- 3) Huge number of people think the food is unhealthy so its healthiness can be improved as much as possible.
- 4) Few people think it's disgusting. So proper feedback should be taken from them for further improvements.

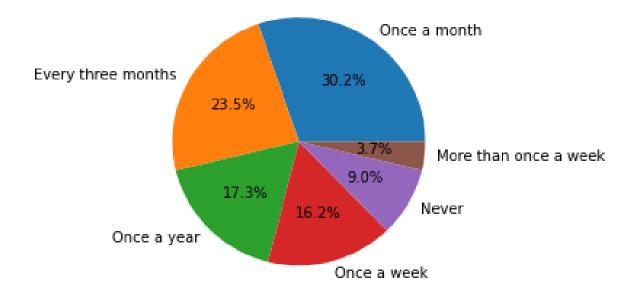
Q3) Compare the age of people visiting the restaurant: Ans:



As we can see from the plot above the normal distribution of age and the number of people visiting the restaurant. Majority visitors are of the age 25 to 65 in that majority visitors are of age 55.

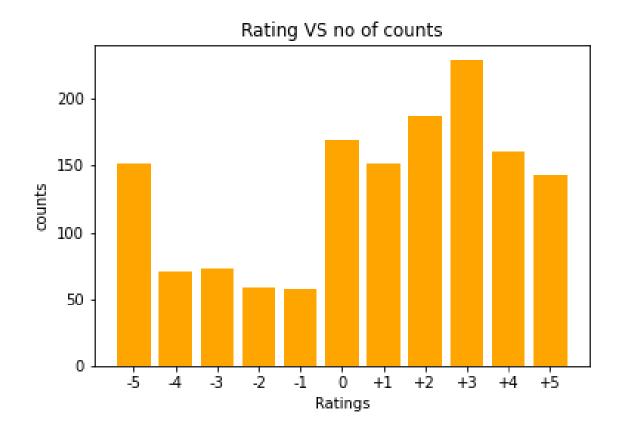
Q4)Compare the visit frequency of customers to the restaurant: Ans:

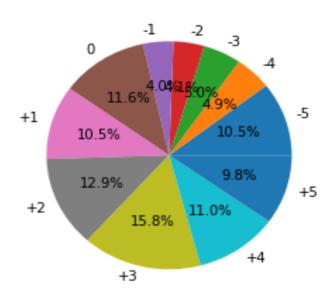




Large number of people visit once a month followed by every three months followed by a year. As compared to the total number of people, very few visit more than once a week so the frequent visitors are less as compared to visitors who visit more than a month.

## Q5)compare the rating given by all visitors:





From the histogram and pie diagram it's clear that the majority of people have given rating as +3 and also many people have given rating as negative so we need to improve customer experience.