**THEORY:**

**Naïve Bayes Implementation:**

Say we have 400 customers with two features age and estimated salary

And purchase as a dependent variable which is in binary form (0 and 1)

I need to find correlation between age and estimated salary and make prediction on probability of customers buying a brand new car from the company

**Dataset:**

In this I have used a dataset of social network ads

Here I have been working as data scientist of car company

Company has launched a brand-new car

I need to train the model using logistic regression of classification to predict which of Company’s previous customers will buy a brand-new irresistible car launched by the company

Now, as a data scientist, I train a classification model to predict which customer buys it

**Data given to me:**

Customers age

Customers estimated salary

Purchased variable: this tells if customer have brought older SUV of the car company

We have 0’s and 1’s saying if customer has brought these SUV’s or not

1. : customer did not buy
2. : customer did buy

Once I predict, advertising team will post on social networks and they will be targeted to customers whom we predict have potential to be a future customer to the same company by purchasing a brand-new SUV If given good deals

**Naïve Bayes**:

Using Naïve bayes I found out the correlation between age and salary

Final Exercise:

To determine which of the customers will buy the brand-new SUV which is newly launched by the car company which they are using already, so that advertising team can target the advertisement on those target audience through social media