**COVID19 prediction**

**We are trying to predict if a person is affected with corona or not based on the symptoms.**

**It helps in detecting the disese at an ear;ly stage and we can take measures to prevent it from spreading to other people.**

**Hypothesis:**

**H0 : The person is not affected with corona**

**H1 : The person is affected with corona**

import numpy as np

import pandas as pd

import seaborn as sns

import matplotlib.pyplot as plt

#Reading data

data1= pd.read\_csv("/content/corona\_tested\_006.csv")

print(data1.shape)

data1.head()

#Total number of values

print("Number of patients", str(len(data1.index)))

#Data Analysis

#Patients who have corona and patients who do not have corona

sns.countplot(x="Corona", data= data1)

# how many had cough and how many did not have corona

sns.countplot(x="Cough", hue="Cough\_symptoms", data= data1)

#how many had fever and how many did not have fever

sns.countplot(x="Fever", hue="Fever", data= data1)

#how many had sore throat and how many did not have sore throat

sns.countplot(x="Sore Throat", hue="Sore\_throat", data= data1)

#how many had shortness of breath and how many did not have it

sns.countplot(x="Corona", hue="Shortness\_of\_breath", data= data1)

#how many had Head ache and how many did not have Head ache

sns.countplot(x="Corona", hue="Headache", data= data1)

# how many are above 60 and not

sns.countplot(x="Corona", hue="Age\_60\_above", data= data1)

# how many are above male , female and the rest given as None

sns.countplot(x="Corona", hue="Sex", data= data1)

sns.countplot(x="Corona", hue="Known\_contact", data= data1)

SQL

1. Find the number of corona patients who faced shortness of breath.

Select count(Shortness\_of\_breath) from **corona\_tested\_006**

2.Find the number of negative corona patients who have fever and sore\_throat.

Select count(Fever), count(Sore\_throat) from **corona\_tested\_006 where Corona = ‘Negative’**

1. Group the data by month and rank the number of positive cases.
2. Find the female negative corona patients who faced cough and headache.

Select Ind\_ID from **corona\_tested\_006 where sex = ‘Female’ and cough\_symptoms = ‘True’ and headache = ‘True’**

1. How many elderly corona patients have faced breathing problems?

Select \* from **corona\_tested\_006 where Age\_60\_above = ‘true’ and**

**Shortness\_of\_breath = ‘True’**

1. Which three symptoms were more common among COVID positive patients?
2. Which symptom was less common among COVID negative people?
3. What are the most common symptoms among COVID positive males whose known contact was abroad?