

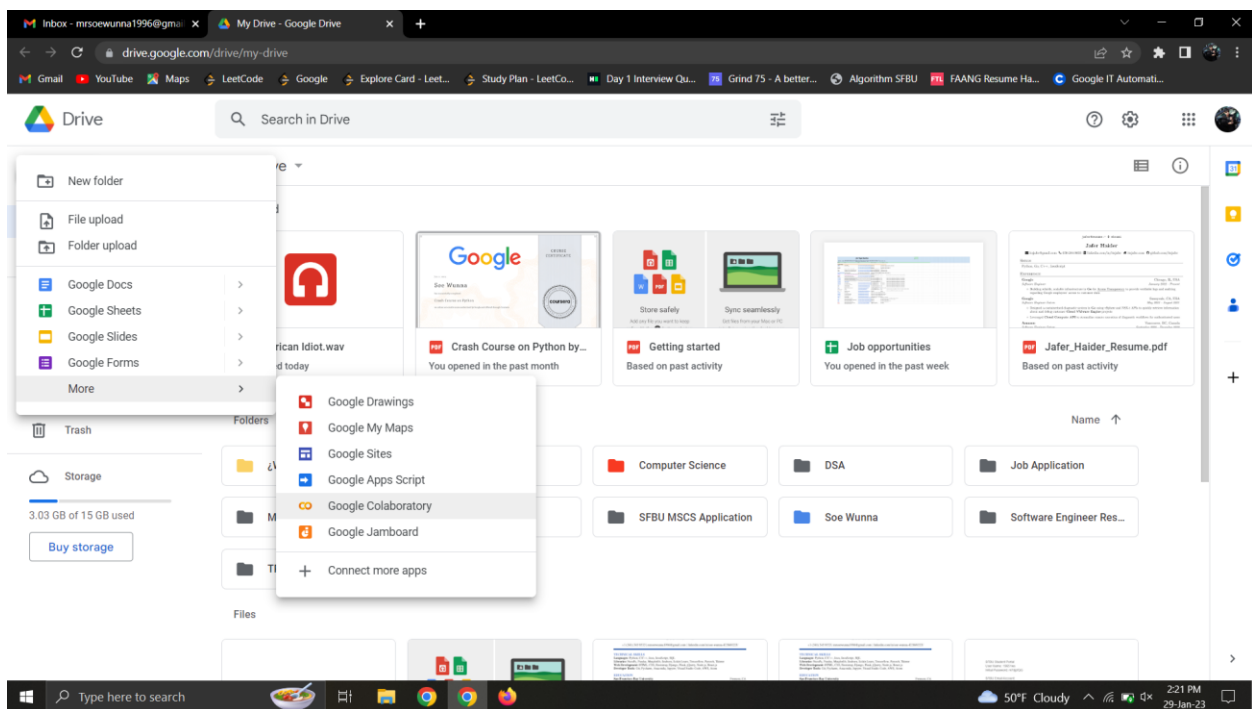
### 5. Get started with Colab ■ ■ ■

- Step 1: Create a Colab project from scratch
- Step 2: Modify an existing Colab project
- Note:
  - Please submit a PDF to show your process of doing this homework.
- References
  - Jupyter

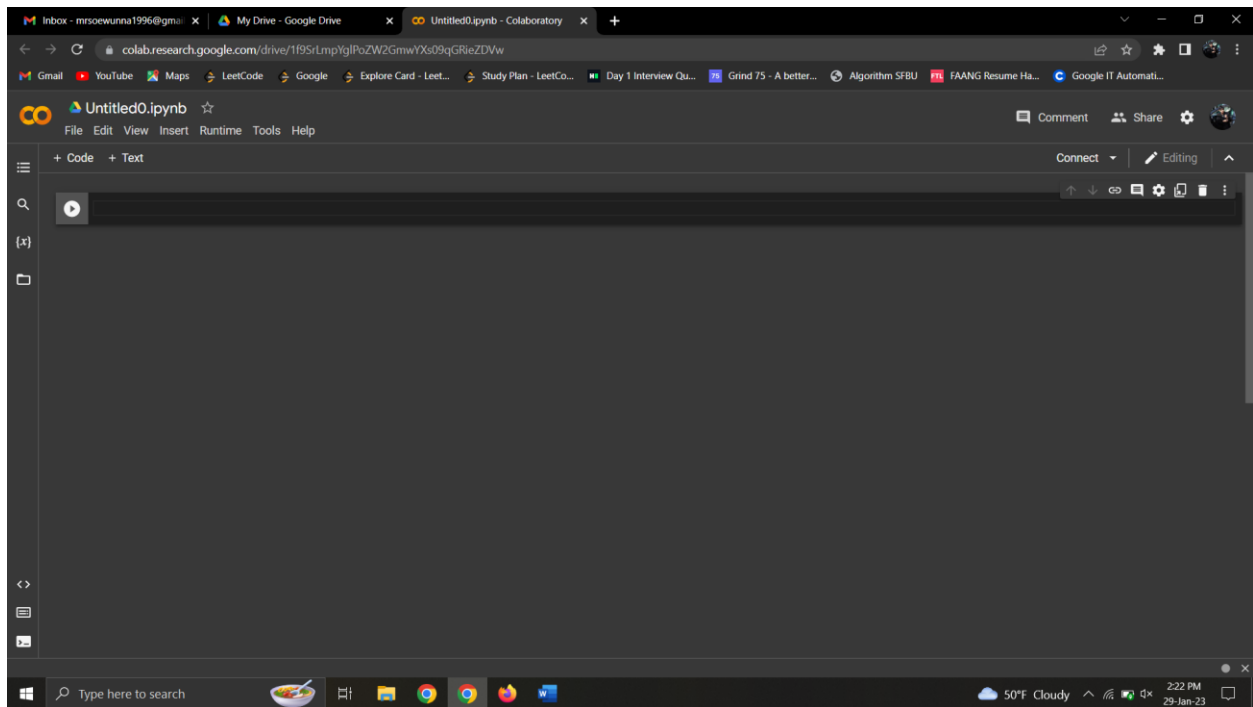
## STEP 1: Create a Colab Project from Scratch

### 1. Log into Google

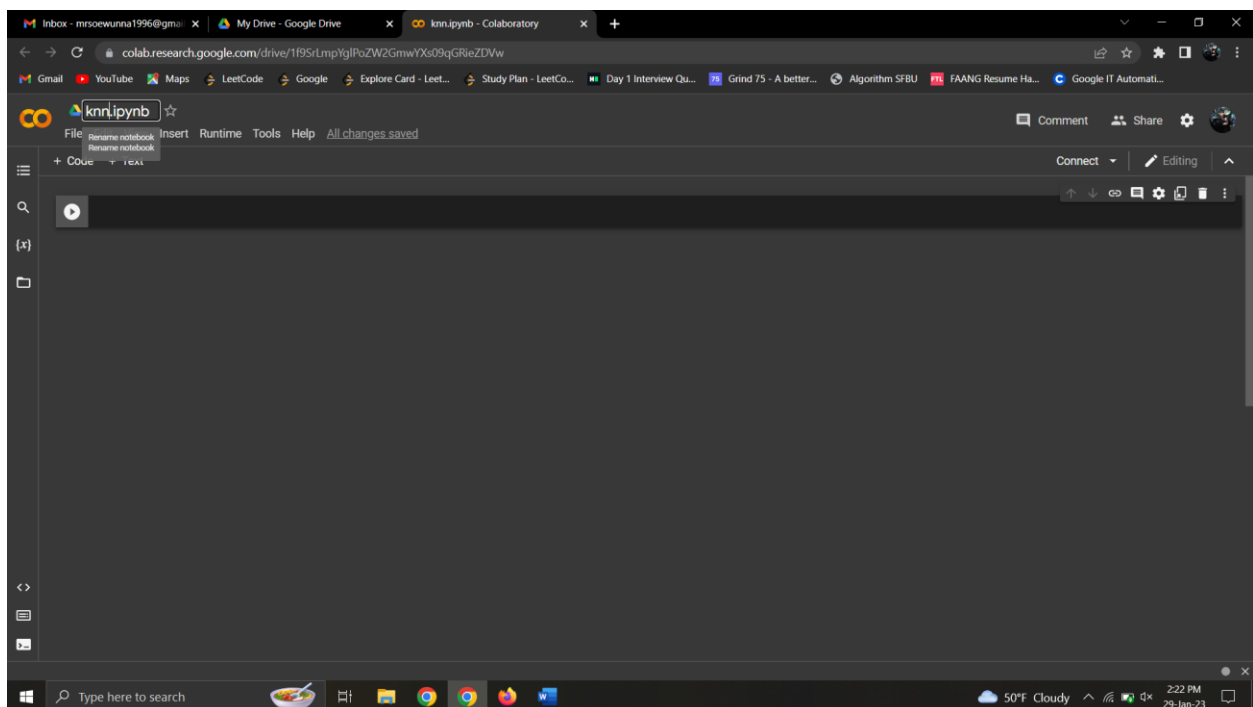
### 2. Google “Colab”



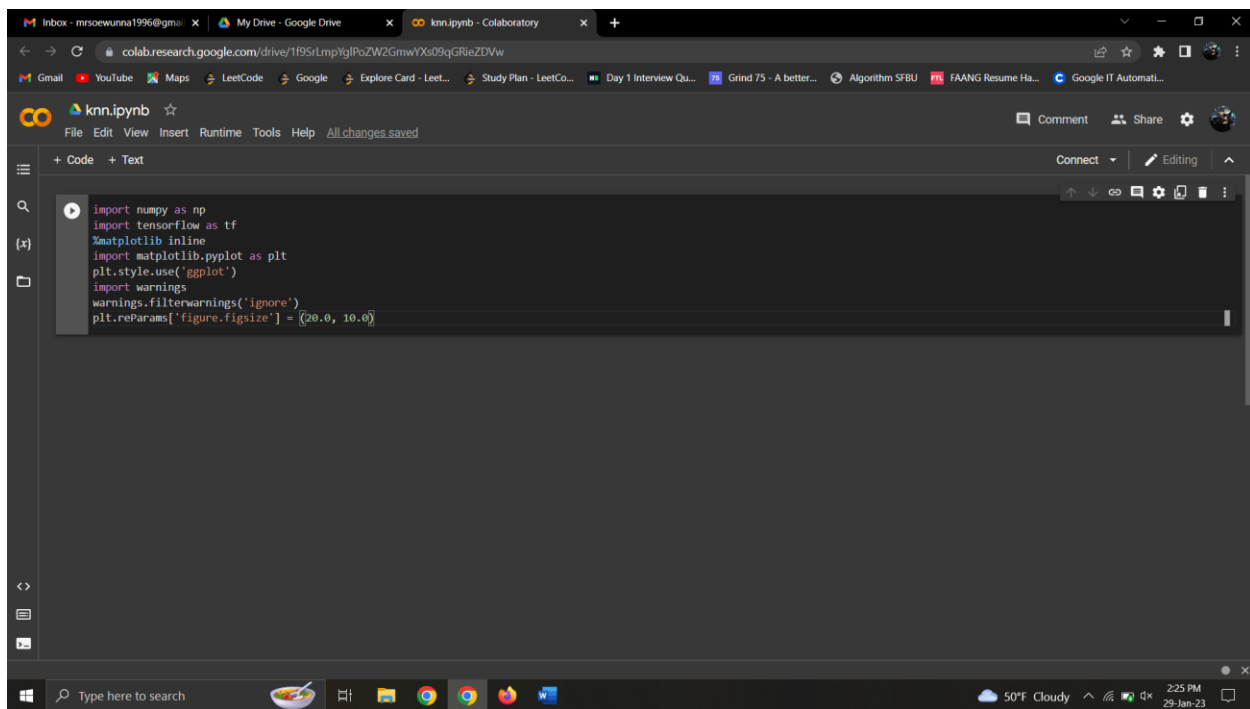
## New Notebook



## Rename to knn.ipynb



## Step 1: Enter the code

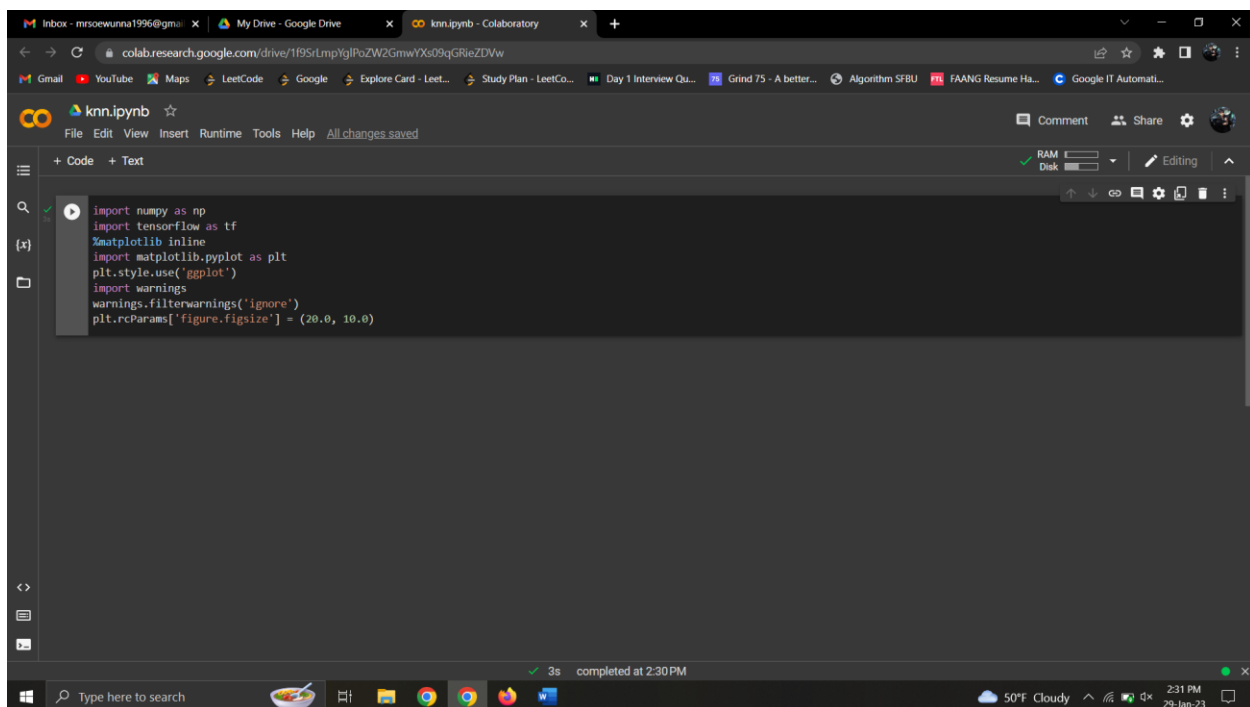


The screenshot shows a Google Colaboratory notebook interface. The browser tabs at the top include 'Inbox - mssoewunna1996@gmail.com', 'My Drive - Google Drive', and 'knn.ipynb - Colaboratory'. The address bar shows the URL 'colab.research.google.com/drive/1f9SrLmpYglPoZW2GmwYXs09qGRieZDVw'. The notebook's menu bar includes 'File', 'Edit', 'View', 'Insert', 'Runtime', 'Tools', 'Help', and 'All changes saved'. The left sidebar has icons for 'Code', 'Text', 'Find', 'Run', and 'File Explorer'. The main code editor contains the following Python code:

```
import numpy as np
import tensorflow as tf
%matplotlib inline
import matplotlib.pyplot as plt
plt.style.use('ggplot')
import warnings
warnings.filterwarnings('ignore')
plt.rcParams['figure.figsize'] = (20.0, 10.0)
```

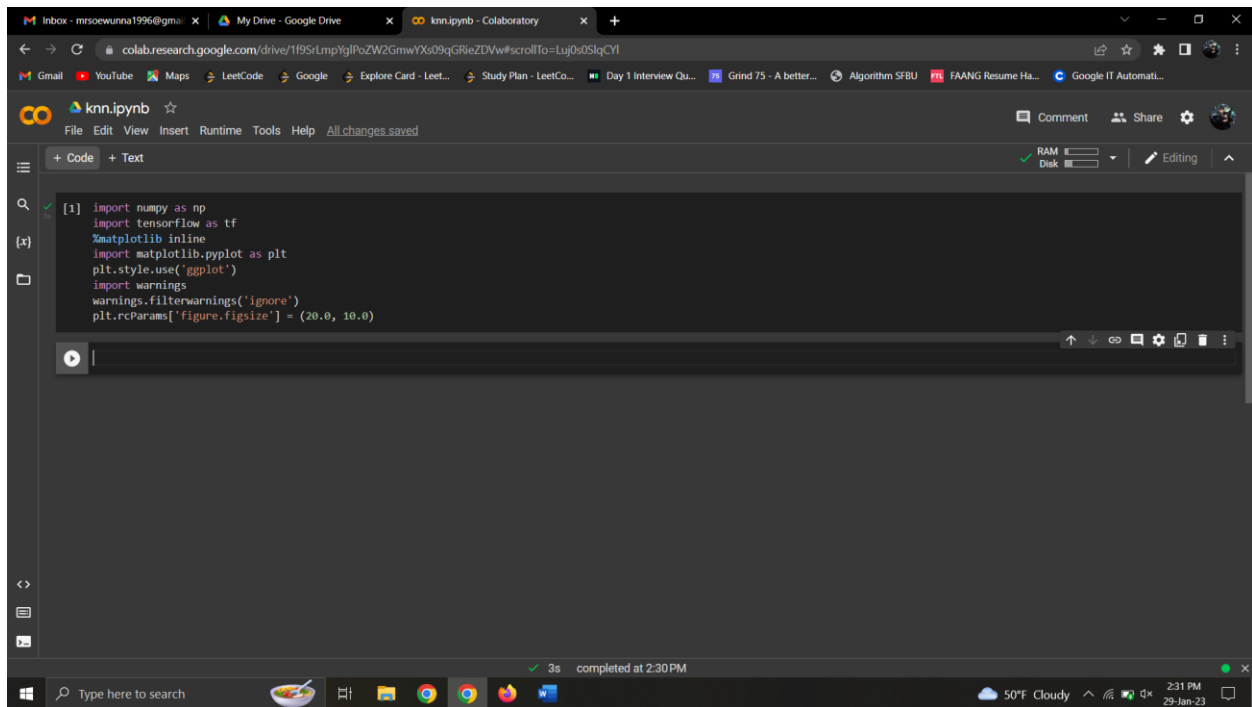
The bottom of the screen shows a Windows taskbar with a search bar, several application icons, and system status information: '50°F Cloudy', '2:25 PM', and '29-Jan-23'.

## Step 2: Running the code



This screenshot shows the same Google Colaboratory notebook as in Step 1, but with the code executed. The code editor now includes a green checkmark icon to the left of the first line. The 'Runtime' menu item in the top bar is highlighted, and a 'RAM' indicator is visible. The bottom status bar shows a green checkmark, '3s', and 'completed at 2:30 PM'. The rest of the interface, including the browser tabs and Windows taskbar, remains the same.

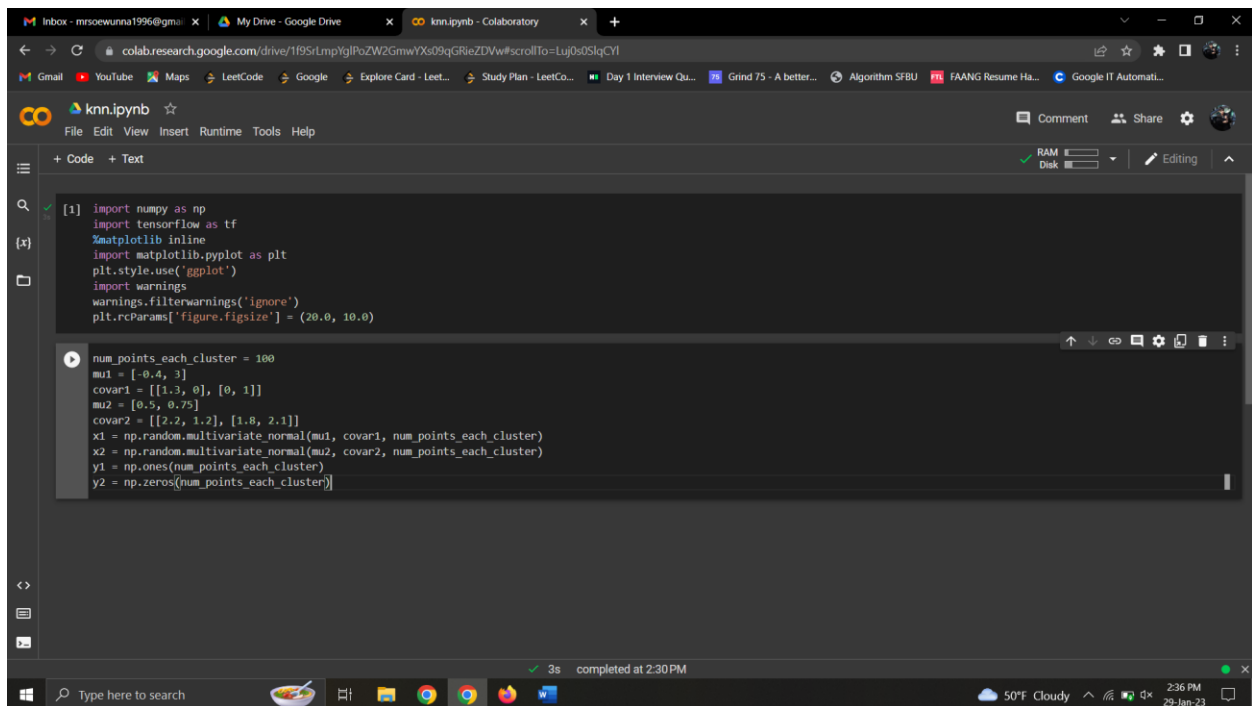
## Add more code



The screenshot shows a Google Colab notebook interface. The browser tabs at the top include 'Inbox - mssoewunna1996@gmail.com', 'My Drive - Google Drive', and 'knn.ipynb - Colaboratory'. The address bar shows the Colab URL. The notebook has a menu bar with 'File', 'Edit', 'View', 'Insert', 'Runtime', 'Tools', and 'Help'. On the right, there are buttons for 'Comment', 'Share', and a settings icon. Below the menu bar, there are tabs for '+ Code' and '+ Text'. The main code area contains a single cell with the following Python code:

```
[1] import numpy as np
import tensorflow as tf
%matplotlib inline
import matplotlib.pyplot as plt
plt.style.use('ggplot')
import warnings
warnings.filterwarnings('ignore')
plt.rcParams['figure.figsize'] = (20.0, 10.0)
```

Below the code cell is a toolbar with icons for undo, redo, run, and other actions. The status bar at the bottom indicates '3s completed at 2:30 PM'.

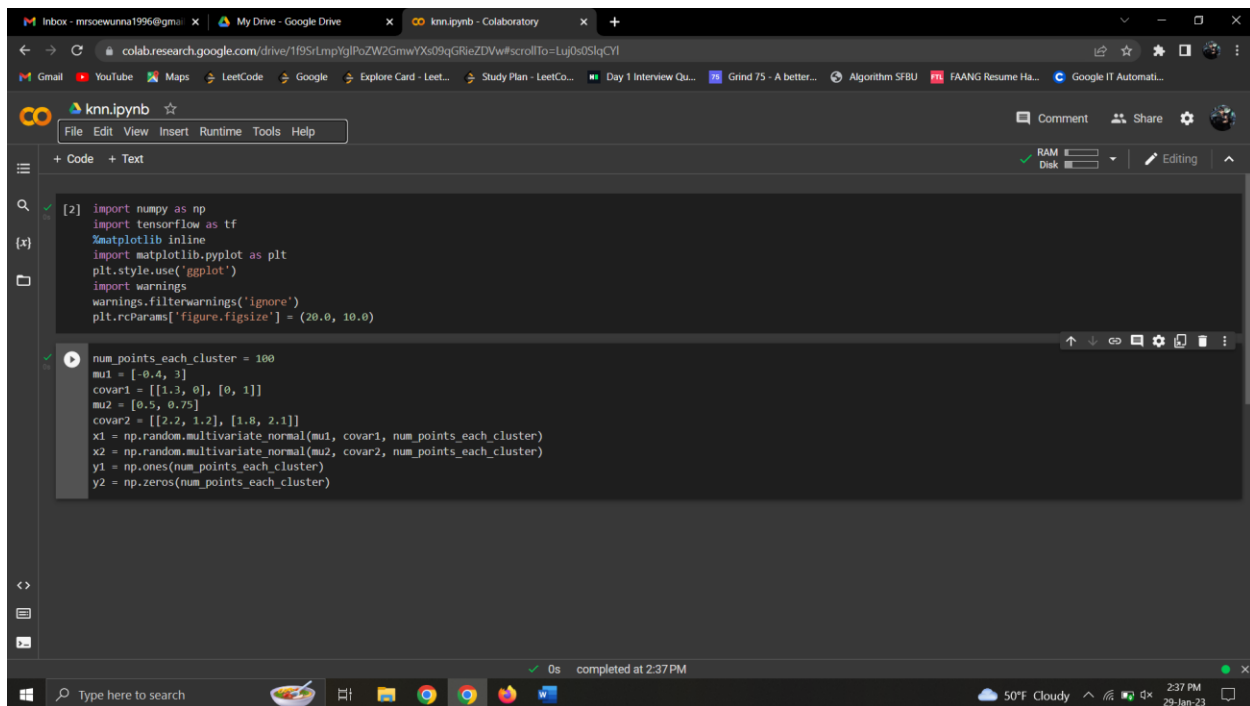
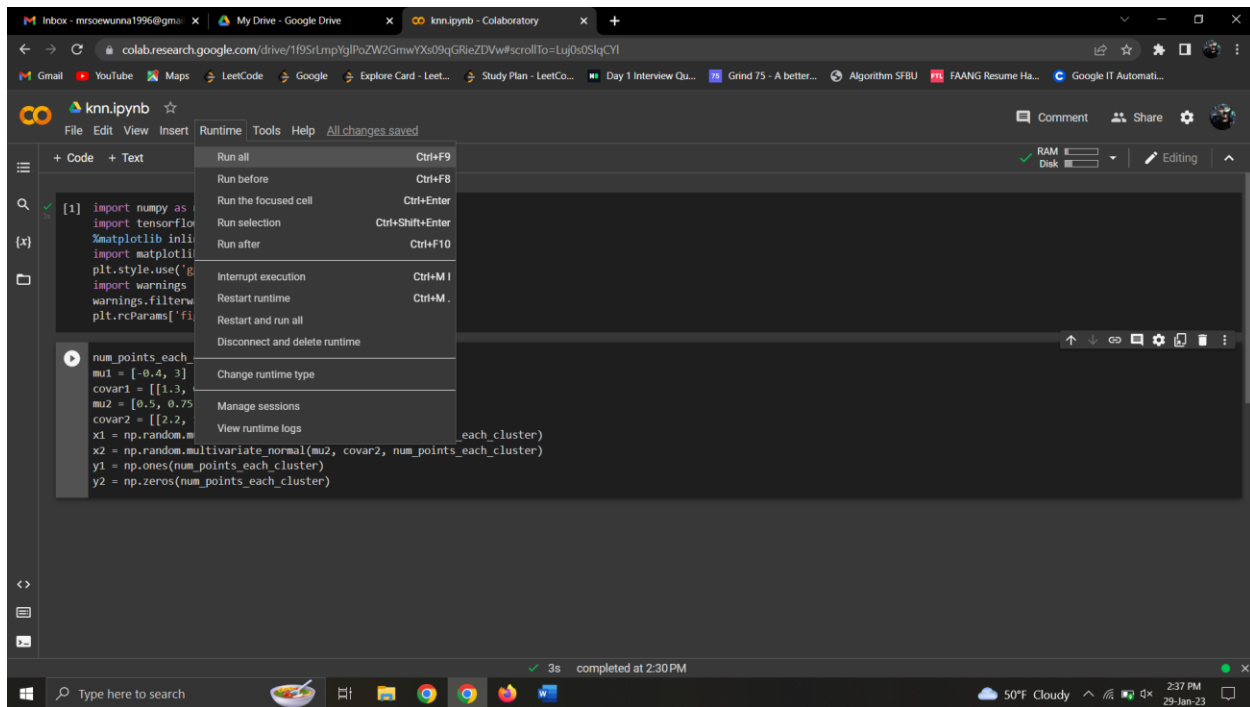


This screenshot shows the same Google Colab notebook, but with a second cell of code added below the first. The first cell remains the same. The second cell contains the following Python code:

```
num_points_each_cluster = 100
mu1 = [-0.4, 3]
covar1 = [[1.3, 0], [0, 1]]
mu2 = [0.5, 0.75]
covar2 = [[2.2, 1.2], [1.8, 2.1]]
x1 = np.random.multivariate_normal(mu1, covar1, num_points_each_cluster)
x2 = np.random.multivariate_normal(mu2, covar2, num_points_each_cluster)
y1 = np.ones(num_points_each_cluster)
y2 = np.zeros(num_points_each_cluster)]
```

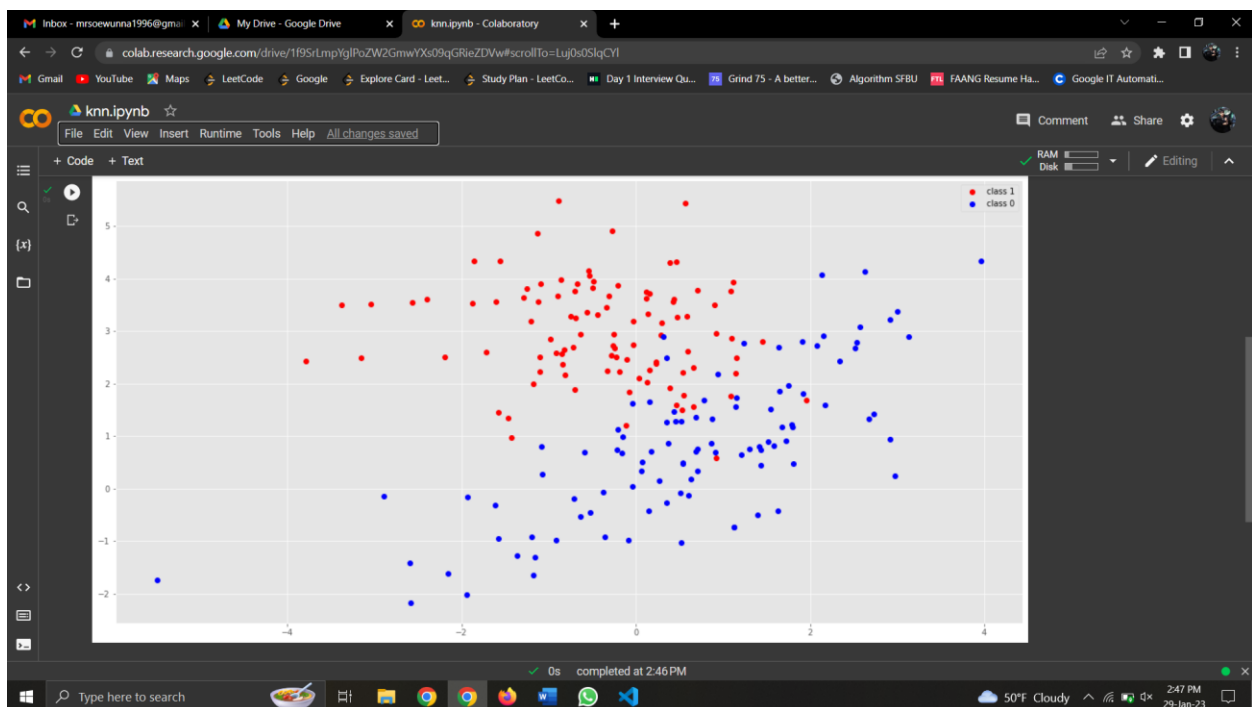
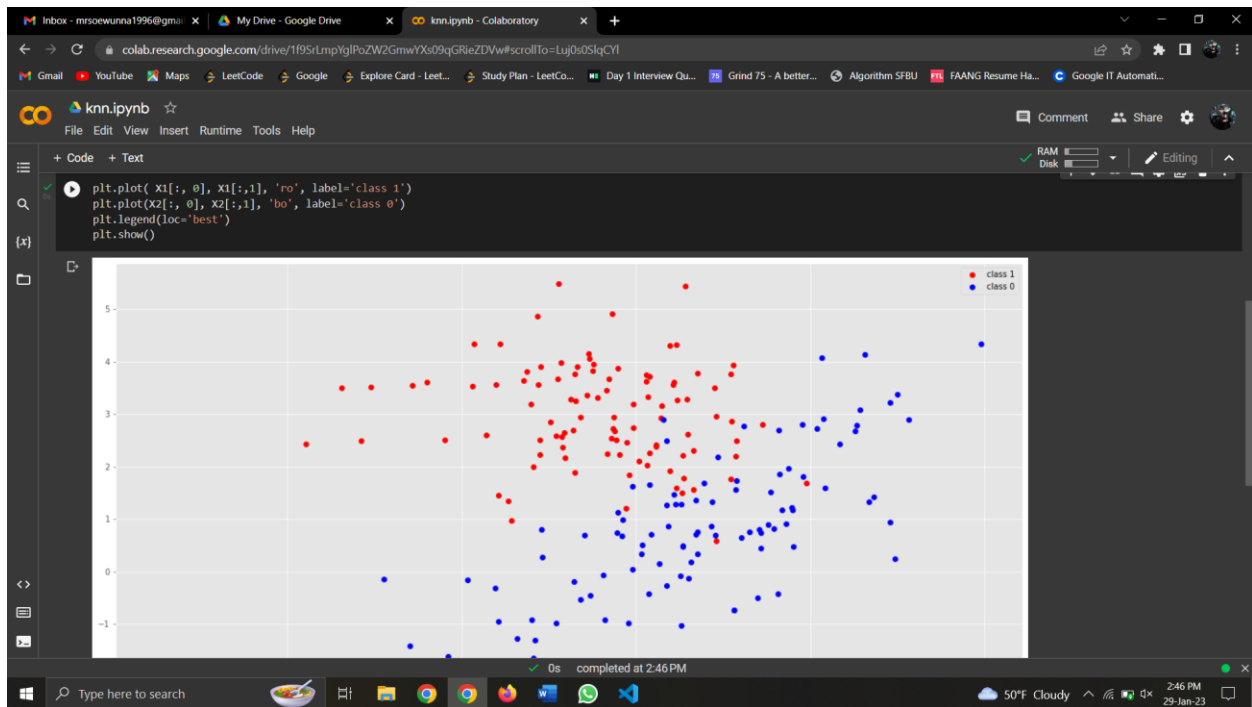
The status bar at the bottom still shows '3s completed at 2:30 PM'.

## Run all steps

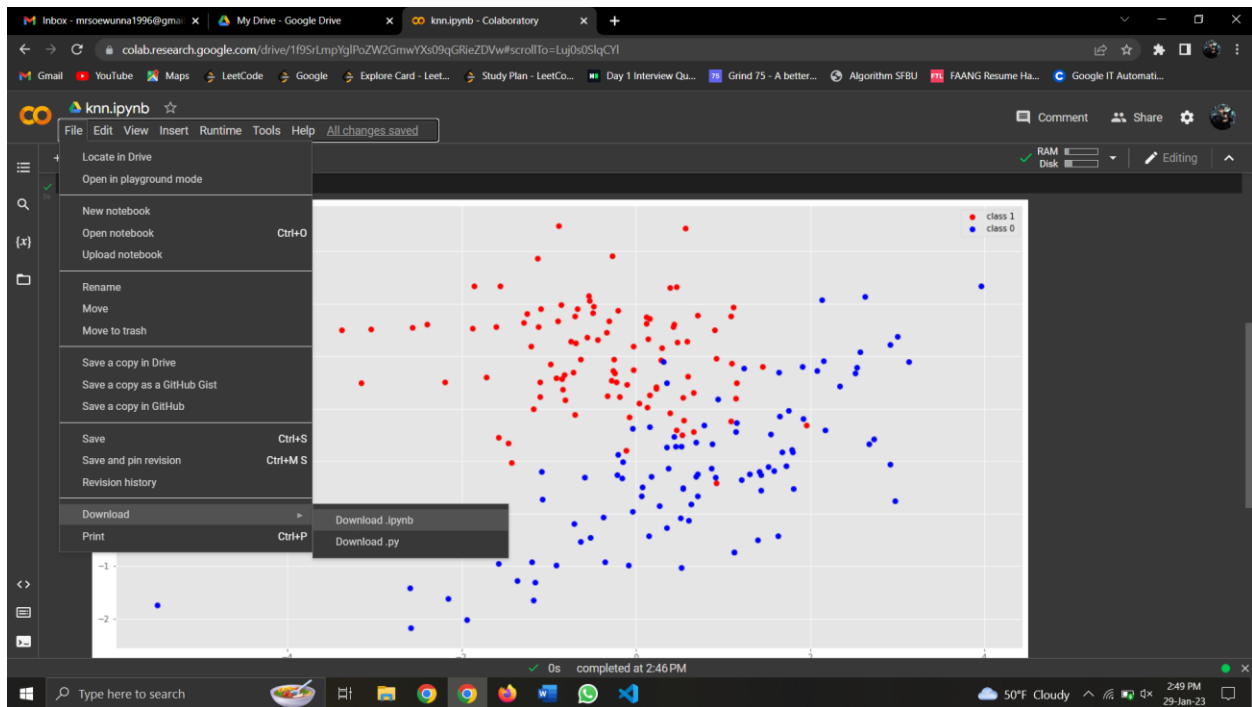


## Step 1: Add more code

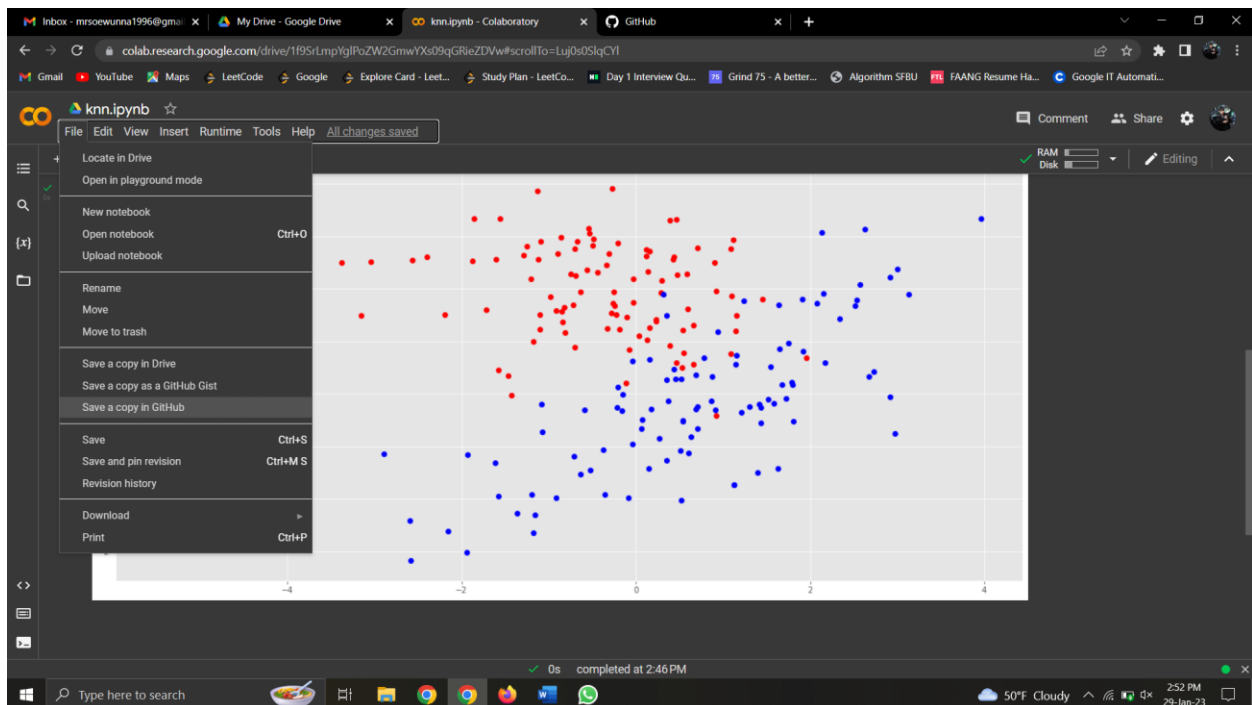
## Step 2: Result of “Run All”



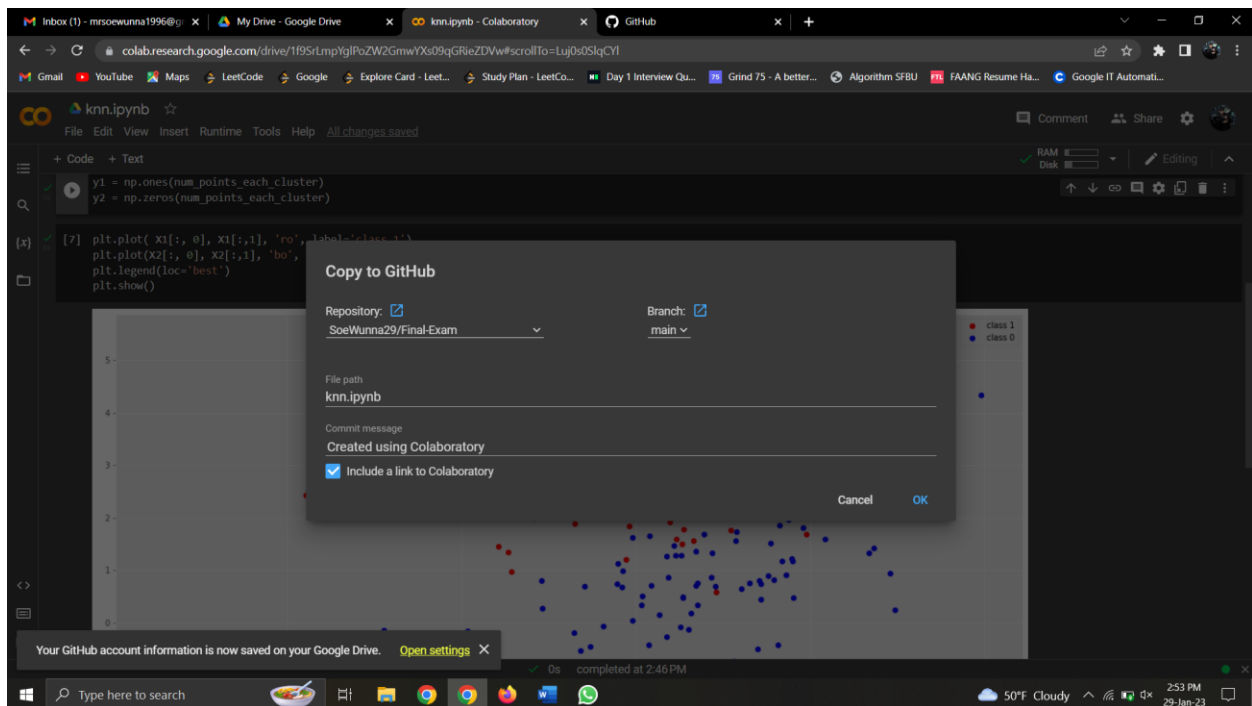
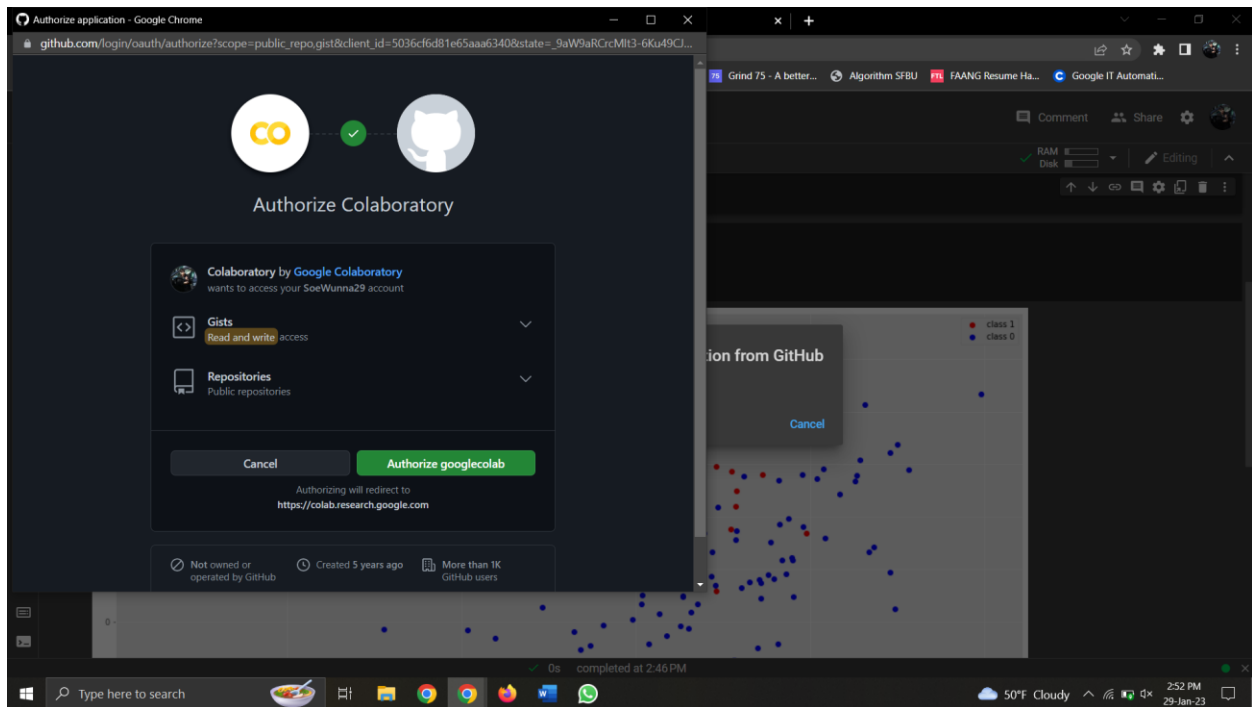
## Downloading the file



## Save as a copy on GitHub

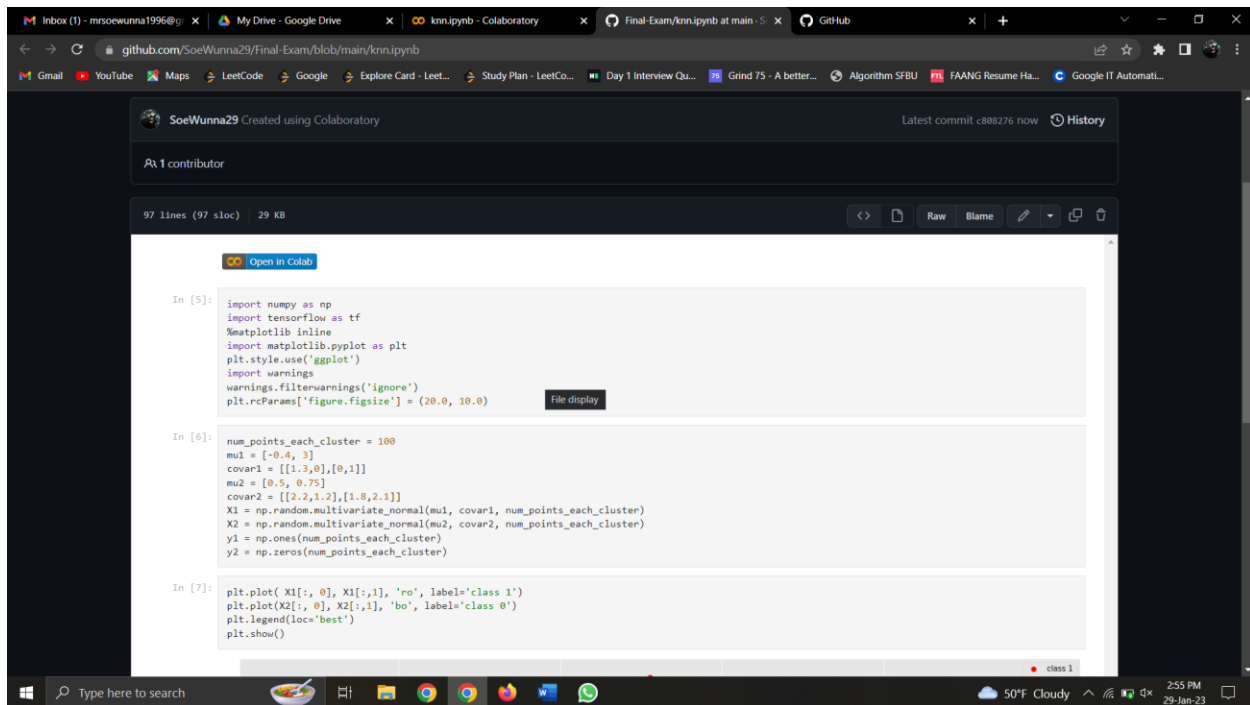


## Authorizing googlecolab



On GitHub - <https://github.com/SoeWunna29/Final-Exam/blob/c80827677662aec54aac42eb9c03ee2ae89f41b4/knn.ipynb>





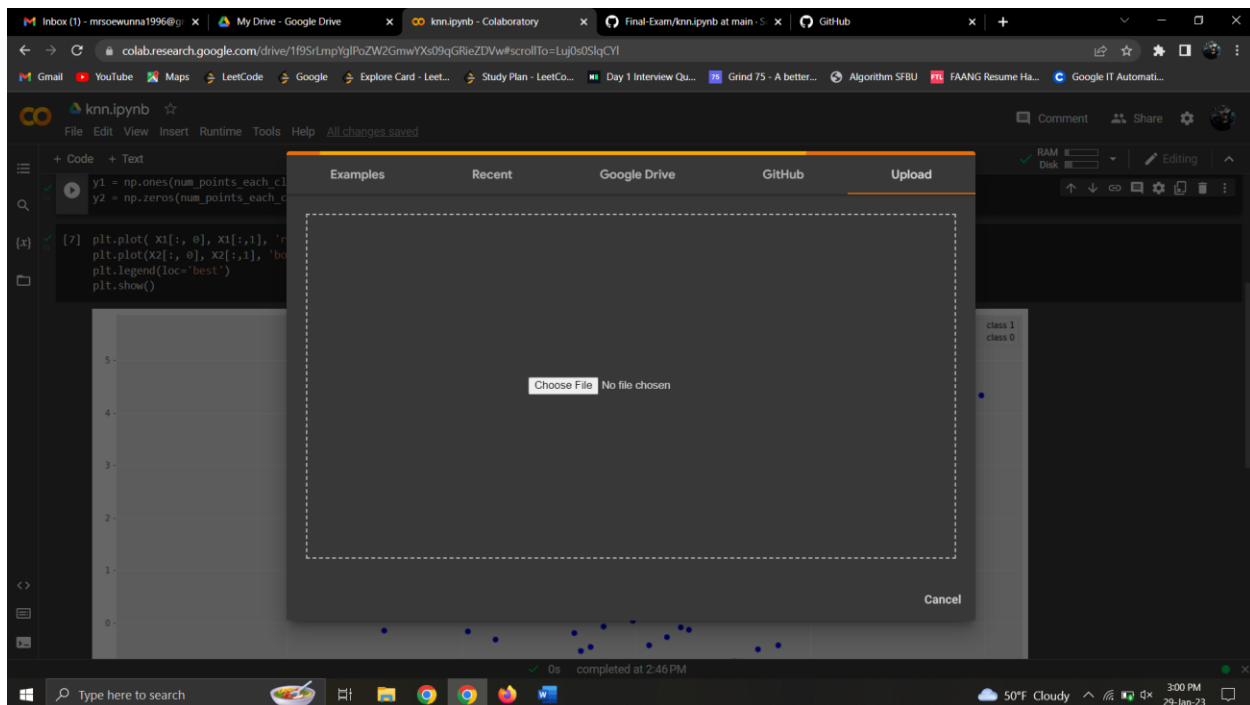
```
In [5]: import numpy as np
import tensorflow as tf
%matplotlib inline
import matplotlib.pyplot as plt
plt.style.use('ggplot')
import warnings
warnings.filterwarnings('ignore')
plt.rcParams['figure.figsize'] = (20.0, 10.0)

In [6]: num_points_each_cluster = 100
mu1 = [-0.4, 3]
covar1 = [[1.3, 0], [0, 1]]
mu2 = [0.5, 0.75]
covar2 = [[2.2, 1.2], [1.8, 2.1]]
X1 = np.random.multivariate_normal(mu1, covar1, num_points_each_cluster)
X2 = np.random.multivariate_normal(mu2, covar2, num_points_each_cluster)
y1 = np.ones(num_points_each_cluster)
y2 = np.zeros(num_points_each_cluster)

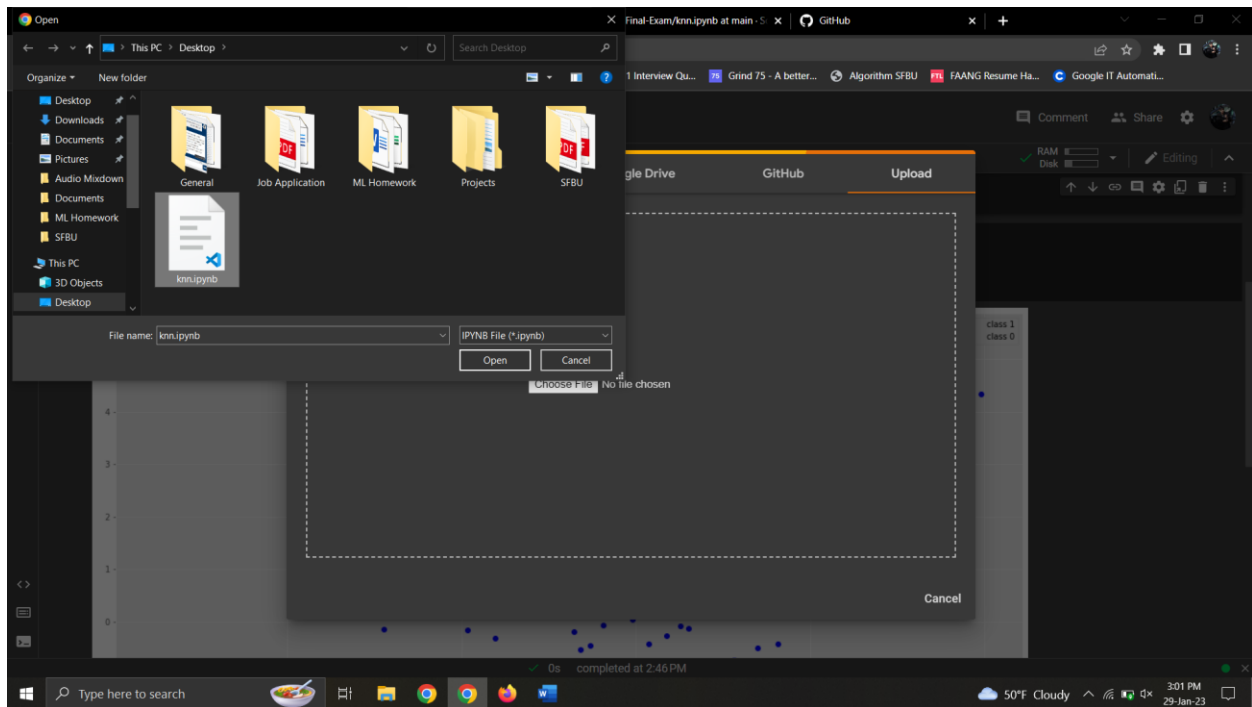
In [7]: plt.plot(X1[:, 0], X1[:, 1], 'ro', label='class 1')
plt.plot(X2[:, 0], X2[:, 1], 'bo', label='class 0')
plt.legend(loc='best')
plt.show()
```

## STEP 2: Modifying the Existing Project

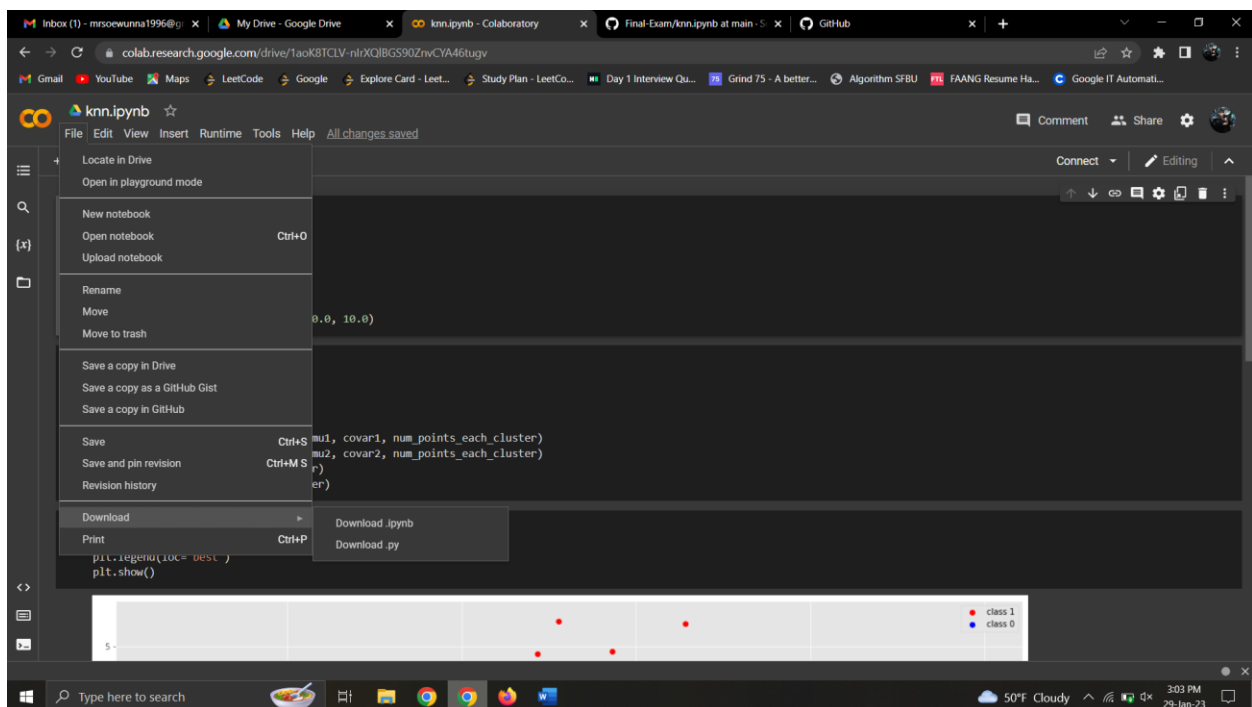
### Upload file



## knn.ipynb



## Save the modified code



## Save the modified code as HTML

