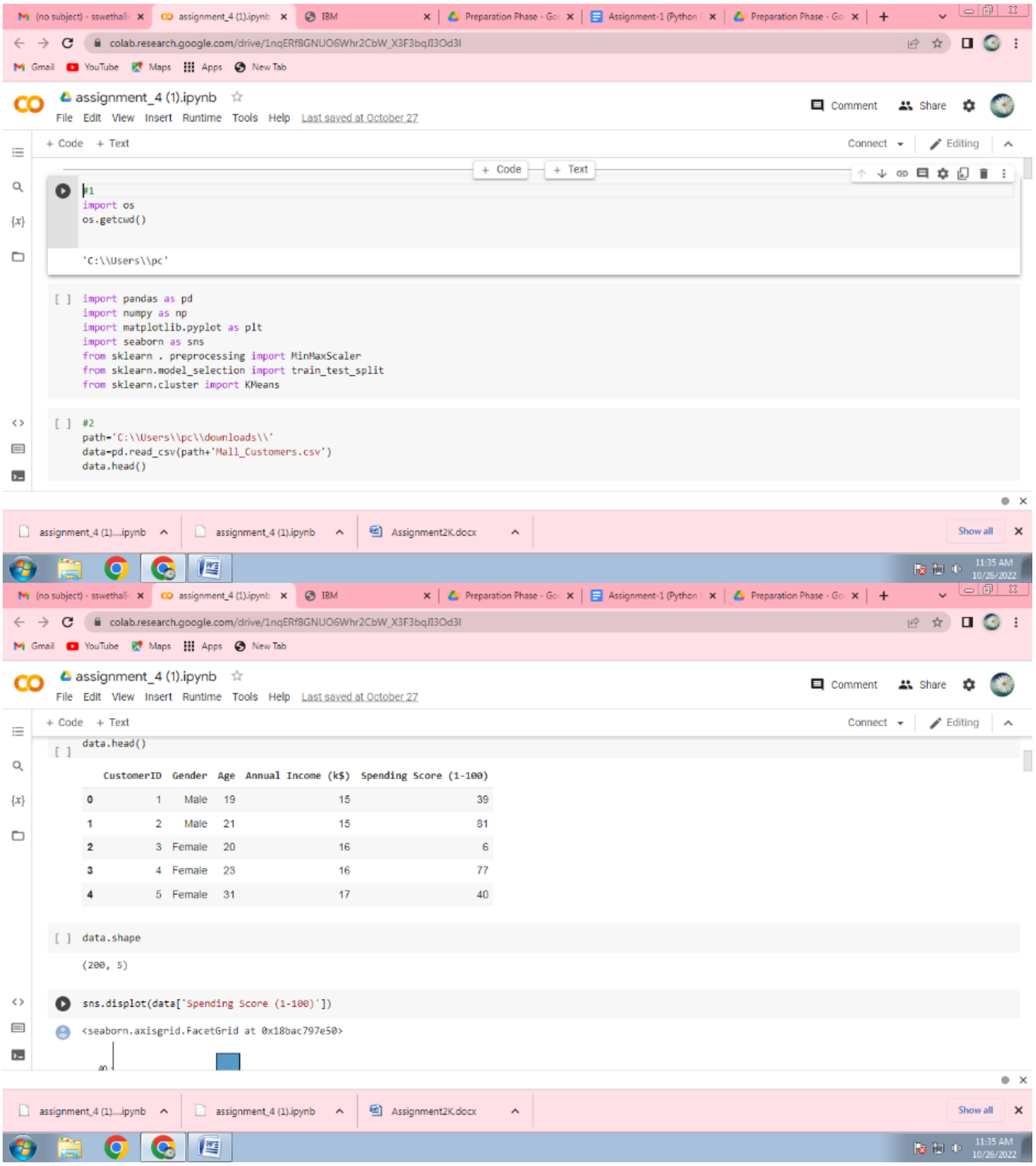
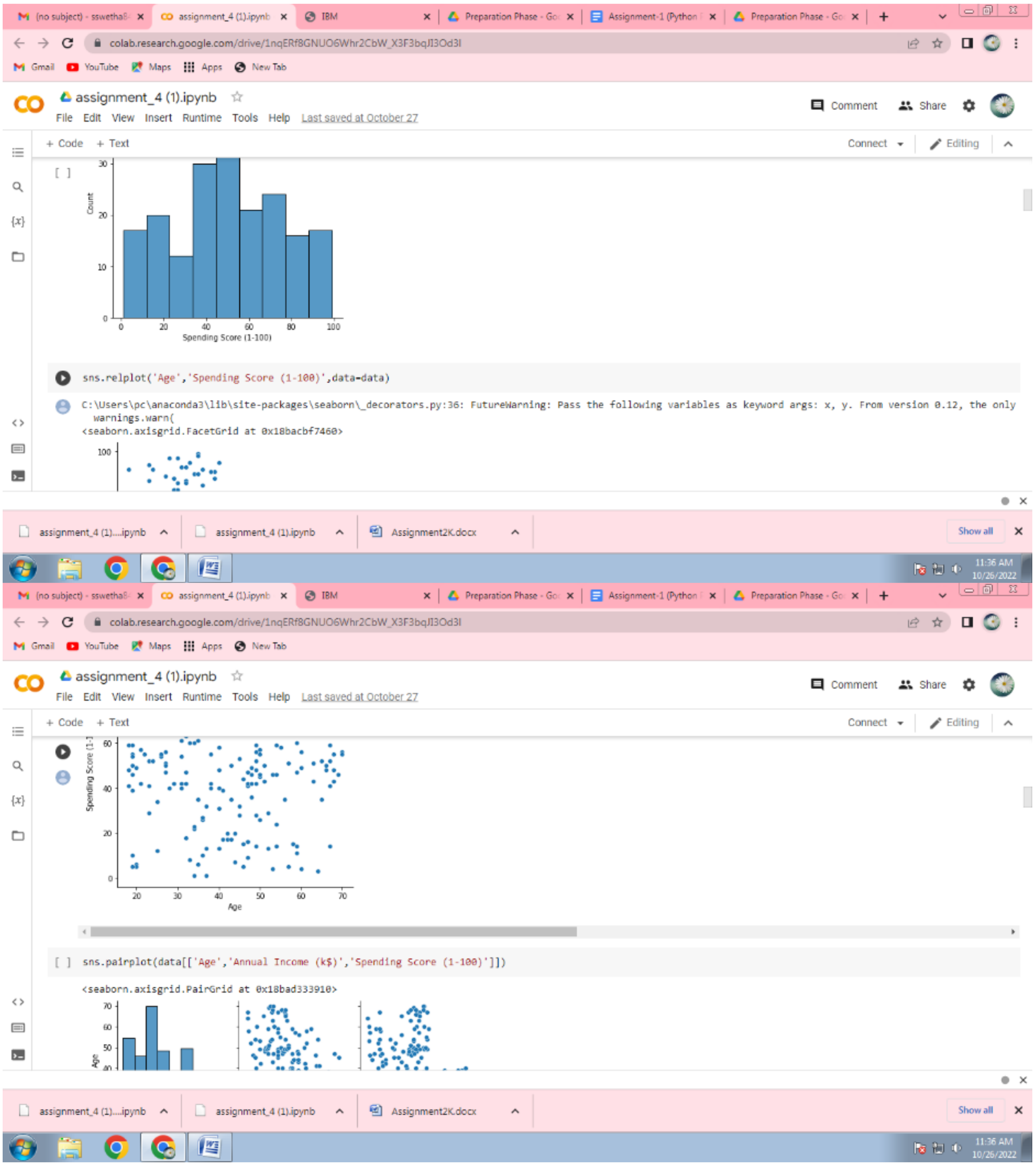
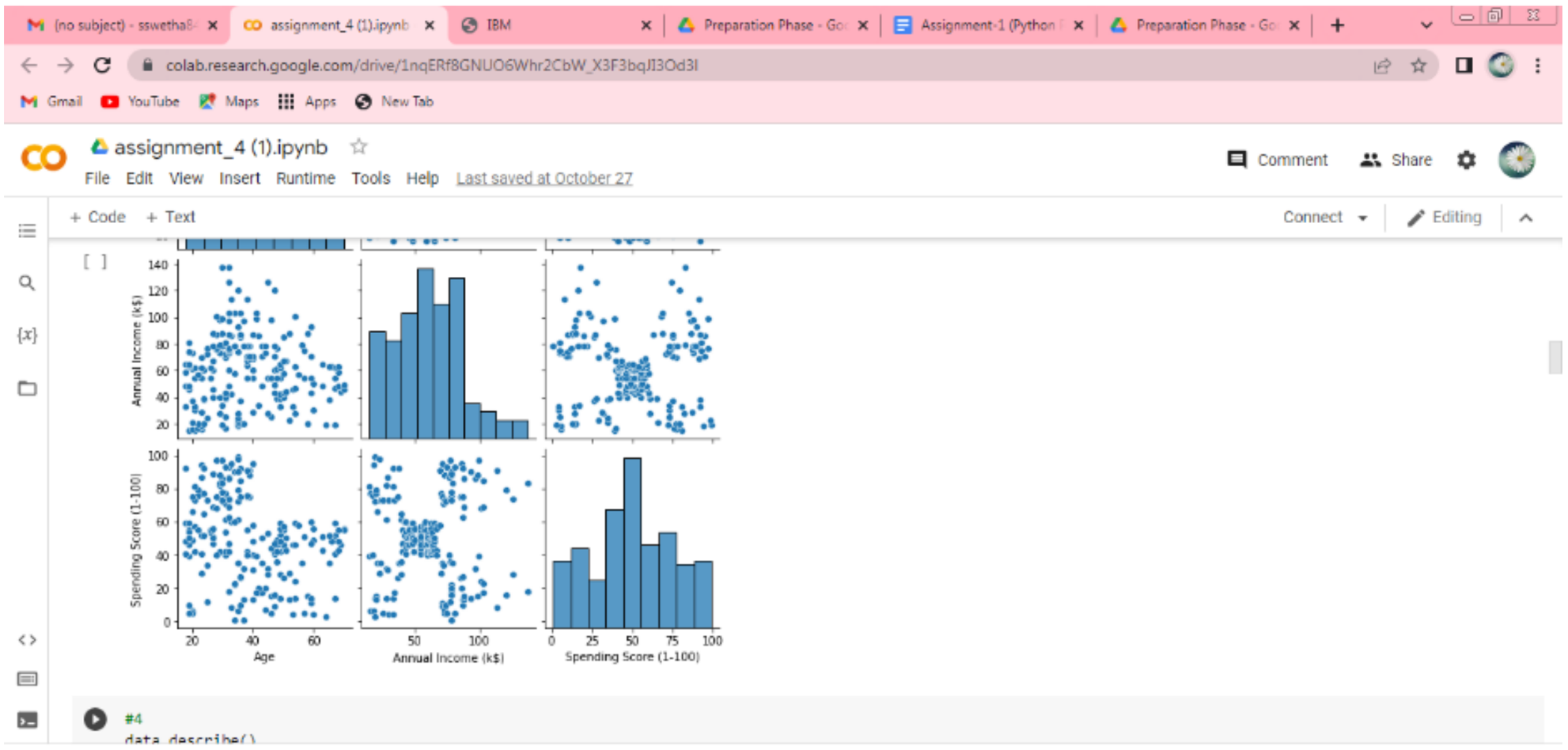
Assignment -1

Python Programming

Assignment Date	19 September 2022
Student Name	Mr. Amarender Katkam
Student Roll Number	043A02201
Maximum Marks	2 Marks

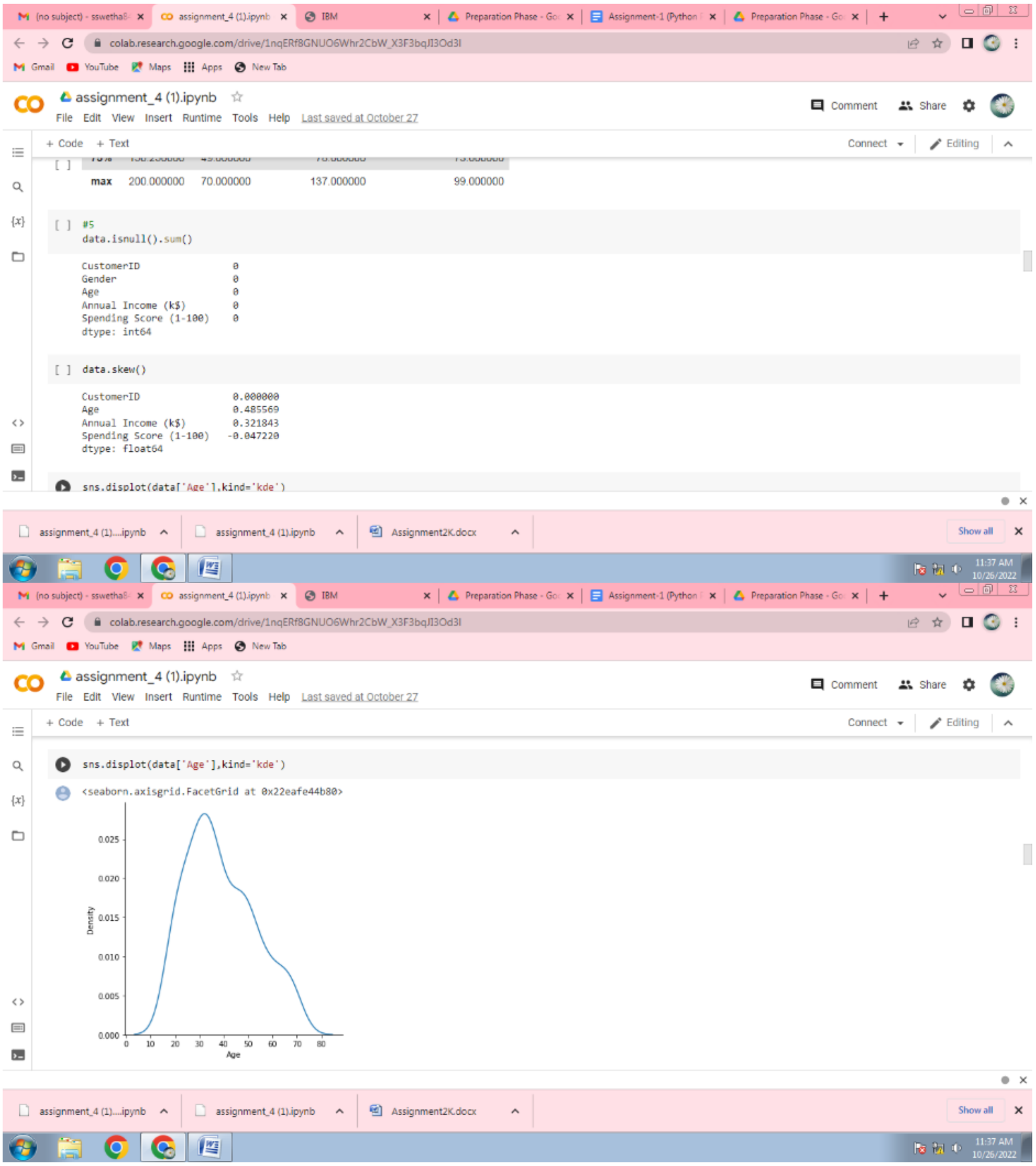

(no subject) - sswetha8
assignment_4 (1).ipynb
IBM
Preparation Phase - Go
Assignment-1 (Python
Preparation Phase - Go
colab.research.google.com/drive/1nqERf8GNUO6Whr2CbW_X3F3bqJI3Od3I
Gmail
YouTube
Maps
Apps
New Tab
assignment_4 (1).ipynb
File Edit View Insert Runtime Tools Help Last saved at October 27
Comment
Share
+ Code + Text
Connect
Editing
#1
import os
os.getcwd()
'C:\\Users\\pc'
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
from sklearn . preprocessing import MinMaxScaler
from sklearn.model_selection import train_test_split
from sklearn.cluster import KMeans
#2
path='C:\\Users\\pc\\downloads\\'
data=pd.read_csv(path+'Mall_Customers.csv')
data.head()
assignment_4 (1)....ipynb
assignment_4 (1).ipynb
Assignment2K.docx
Show all
11:35 AM
10/26/2022
data.head()
CustomerID Gender Age Annual Income (k$) Spending Score (1-100)
0 1 Male 19 15 39
1 2 Male 21 15 81
2 3 Female 20 16 6
3 4 Female 23 16 77
4 5 Female 31 17 40
data.shape
(200, 5)
sns.displot(data['Spending Score (1-100)'])
<seaborn.axisgrid.FacetGrid at 0x18bac797e50>
40

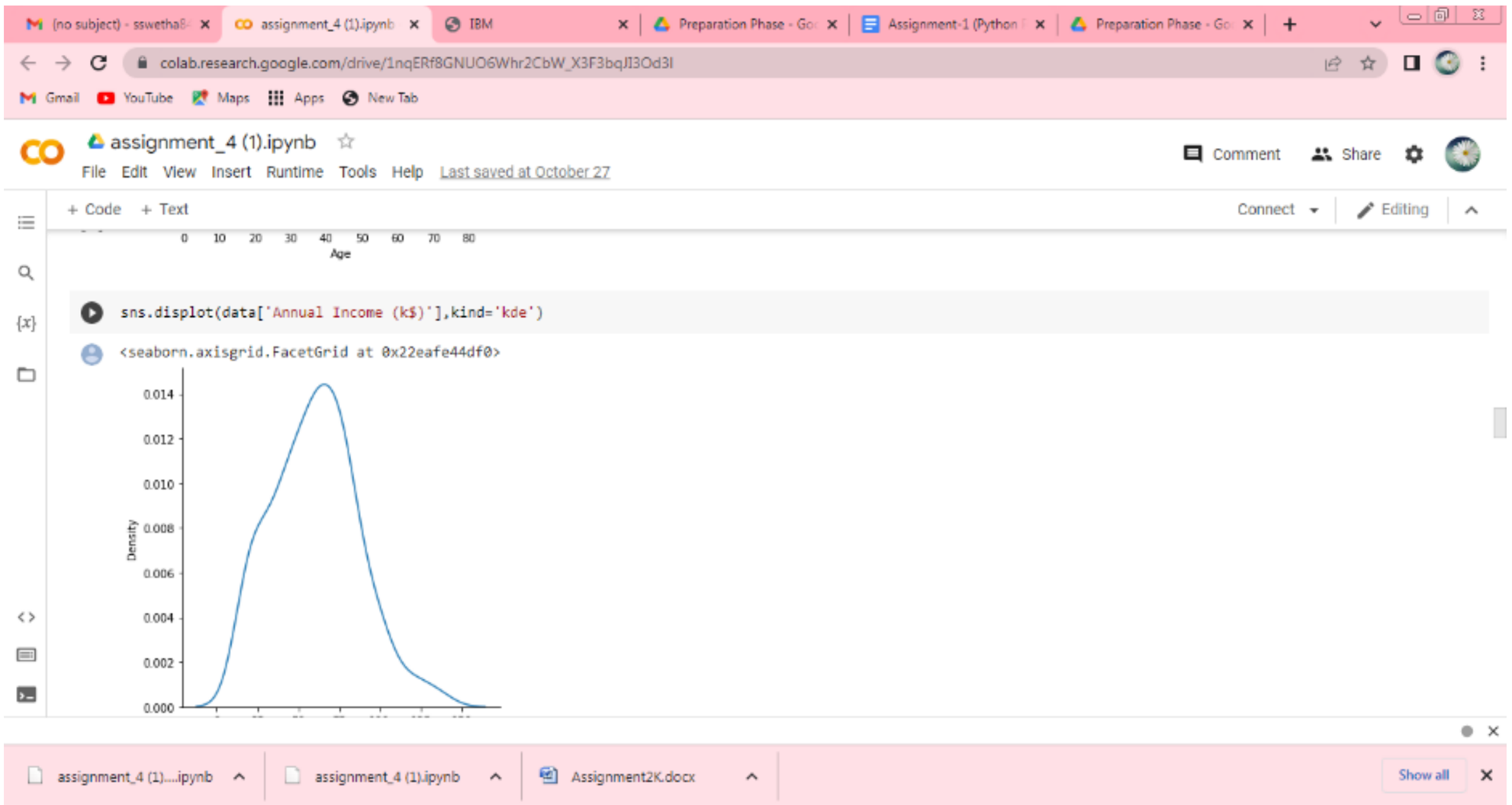

assignment_4 (1).ipynb
File Edit View Insert Runtime Tools Help Last saved at October 27
Comment
Share
+ Code + Text
Connect
Editing
Count
Spending Score (1-100)
sns.relplot('Age','Spending Score (1-100)',data=data)
C:\Users\pc\anaconda3\lib\site-packages\seaborn_decorators.py:36: FutureWarning: Pass the following variables as keyword args: x, y. From version 0.12, the only
warnings.warn(
<seaborn.axisgrid.FacetGrid at 0x18bacbf7460>
Spending Score (1-100)
Age
sns.pairplot(data[['Age','Annual Income (k$)','Spending Score (1-100)']])
<seaborn.axisgrid.PairGrid at 0x18bad333910>
assignment_4 (1)....ipynb
assignment_4 (1).ipynb
Assignment2K.docx
Show all
11:36 AM
10/26/2022

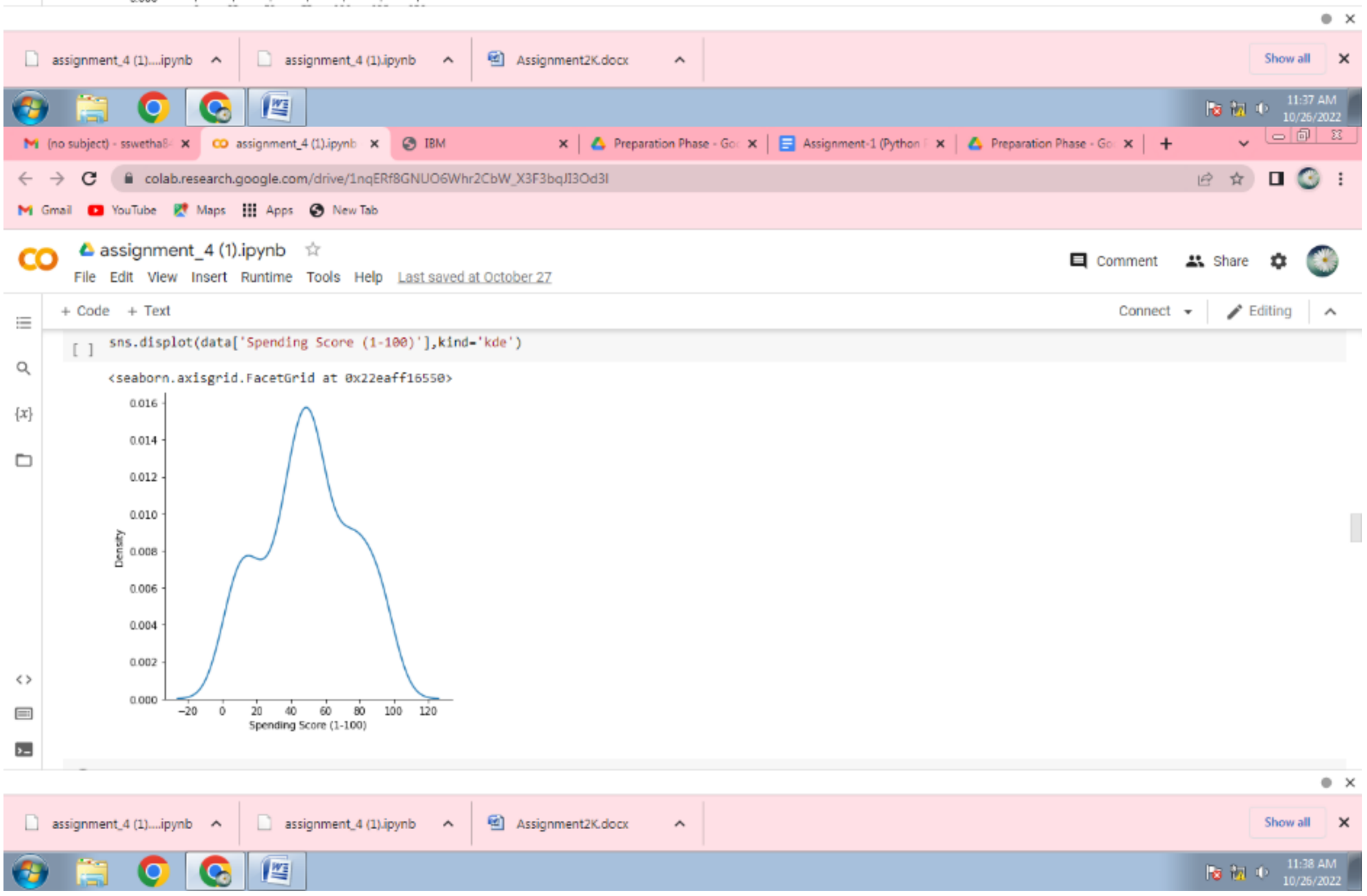



```
#4
data.describe()
```

	CustomerID	Age	Annual Income (k$)	Spending Score (1-100)
count	200.000000	200.000000	200.000000	200.000000
mean	100.500000	38.850000	60.560000	50.200000
std	57.879185	13.969007	26.264721	25.823522
min	1.000000	18.000000	15.000000	1.000000
25%	50.750000	28.750000	41.500000	34.750000
50%	100.500000	36.000000	61.500000	50.000000
75%	150.250000	49.000000	78.000000	73.000000
max	200.000000	70.000000	137.000000	99.000000


(no subject) - sswetha8
assignment_4 (1).ipynb
IBM
Preparation Phase - Go
Assignment-1 (Python
Preparation Phase - Go
colab.research.google.com/drive/1nqERf8GNUO6Whr2CbW_X3F3bqJI3Od3I
Gmail
YouTube
Maps
Apps
New Tab
assignment_4 (1).ipynb
File Edit View Insert Runtime Tools Help Last saved at October 27
Comment
Share
+ Code + Text
Connect
Editing
max 200.000000 70.000000 137.000000 99.000000
#5
data.isnull().sum()
CustomerID 0
Gender 0
Age 0
Annual Income (k$) 0
Spending Score (1-100) 0
dtype: int64
data.skew()
CustomerID 0.000000
Age 0.485569
Annual Income (k$) 0.321843
Spending Score (1-100) -0.047220
dtype: float64
sns.displot(data['Age'],kind='kde')
assignment_4 (1)....ipynb
assignment_4 (1).ipynb
Assignment2K.docx
Show all
11:37 AM
10/26/2022
<seaborn.axisgrid.FacetGrid at 0x22eafe44b80>
Density
Age


colab.research.google.com/drive/1nqERf8GNUO6Whr2CbW_X3F3bqJI3Od3I
assignment_4 (1).ipynb
File Edit View Insert Runtime Tools Help Last saved at October 27
Comment
Share
Connect
Editing
+ Code + Text
Age
sns.displot(data['Annual Income (k$)'],kind='kde')
<seaborn.axisgrid.FacetGrid at 0x22eafe44df0>
Density


assignment_4 (1)....ipynb
assignment_4 (1).ipynb
Assignment2K.docx
Show all
11:37 AM
10/26/2022
colab.research.google.com/drive/1nqERf8GNUO6Whr2CbW_X3F3bqJI3Od3I
assignment_4 (1).ipynb
File Edit View Insert Runtime Tools Help Last saved at October 27
Comment
Share
Connect
Editing
+ Code + Text
[ ] sns.displot(data['Spending Score (1-100)'],kind='kde')
<seaborn.axisgrid.FacetGrid at 0x22eaff16550>
Density
Spending Score (1-100)

assignment_4 (1)....ipynb
assignment_4 (1).ipynb
Assignment2K.docx
Show all
11:38 AM
10/26/2022

(no subject) - sswetha8 | assignment_4 (1).ipynb | IBM | Preparation Phase - Go | Assignment-1 (Python | Preparation Phase - Go

colab.research.google.com/drive/1nqERf8GNUO6Whr2CbW_X3F3bqJI3Od3I

Gmail YouTube Maps Apps New Tab

assignment_4 (1).ipynb

File Edit View Insert Runtime Tools Help Last saved at October 27

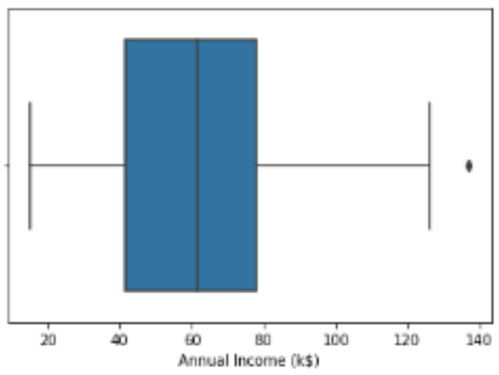
Comment Share

+ Code + Text

Connect Editing

```
sns.boxplot(data['Annual Income (k$)'])
```

```
C:\Users\pc\anaconda3\lib\site-packages\seaborn\_decorators.py:36: FutureWarning: Pass the following variable as a keyword arg: x. From version 0.12, the only val
  warnings.warn(
<AxesSubplot:xlabel='Annual Income (k$)'>
```



assignment_4 (1)....ipynb | assignment_4 (1).ipynb | Assignment2K.docx | Show all

11:38 AM 10/26/2022

(no subject) - sswetha8 | assignment_4 (1).ipynb | IBM | Preparation Phase - Go | Assignment-1 (Python | Preparation Phase - Go

colab.research.google.com/drive/1nqERf8GNUO6Whr2CbW_X3F3bqJI3Od3I

Gmail YouTube Maps Apps New Tab

assignment_4 (1).ipynb

File Edit View Insert Runtime Tools Help Last saved at October 27

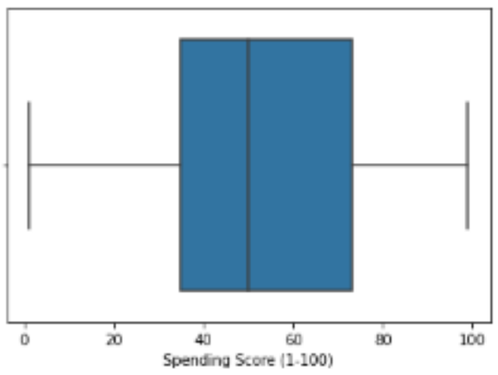
Comment Share

+ Code + Text

Connect Editing

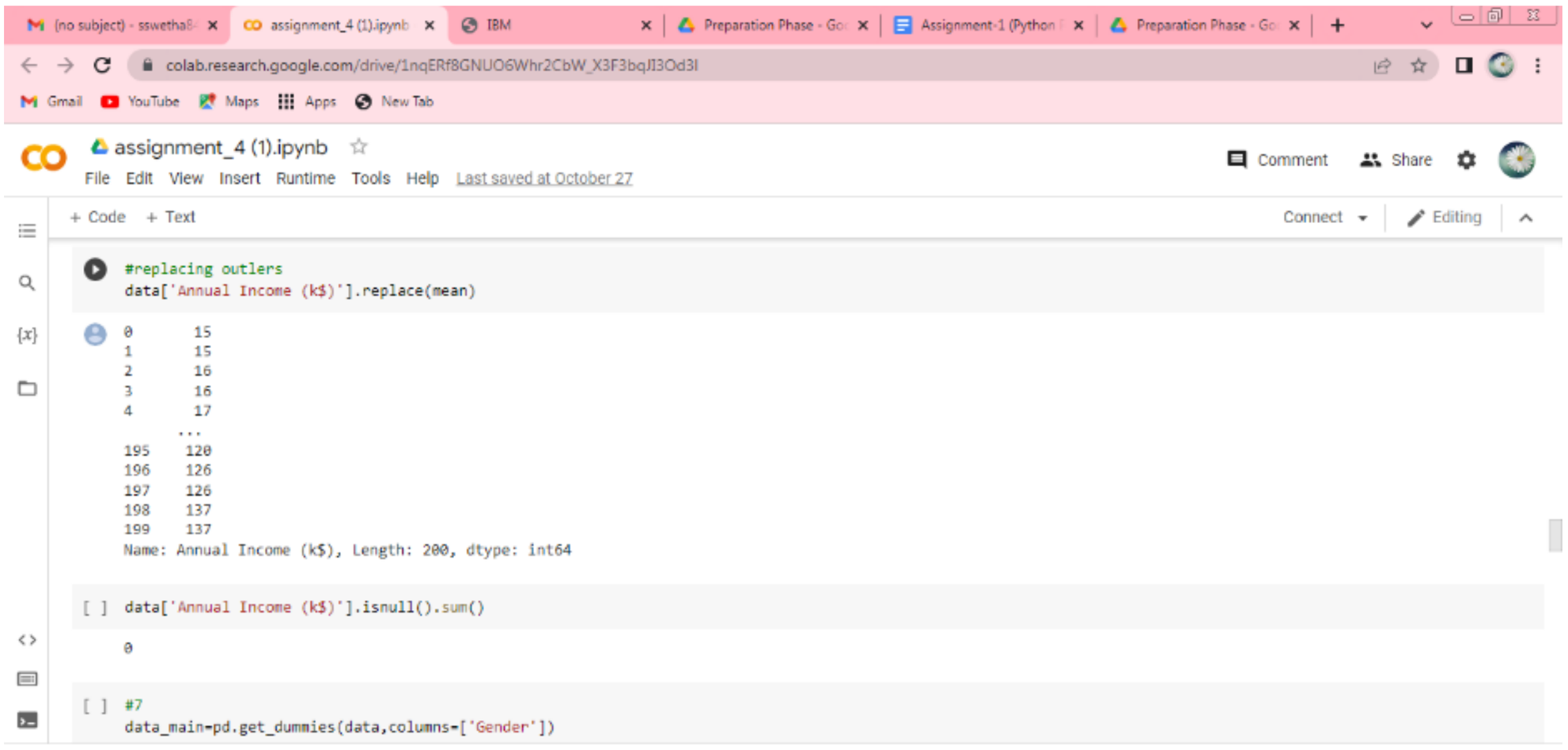
```
sns.boxplot(data['Spending Score (1-100)'])
```

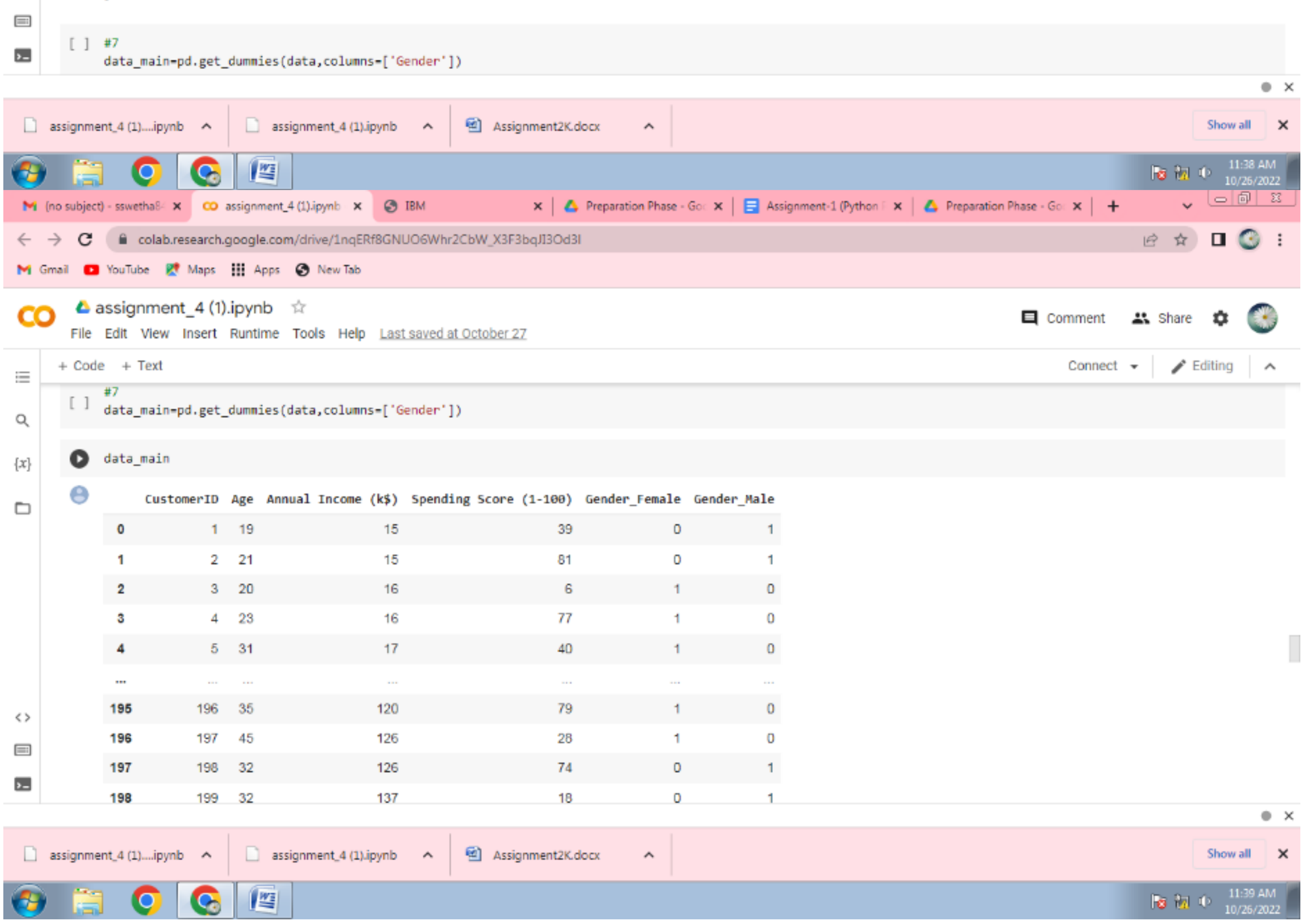
```
C:\Users\pc\anaconda3\lib\site-packages\seaborn\_decorators.py:36: FutureWarning: Pass the following variable as a keyword arg: x. From version 0.12, the only val
  warnings.warn(
<AxesSubplot:xlabel='Spending Score (1-100)'>
```



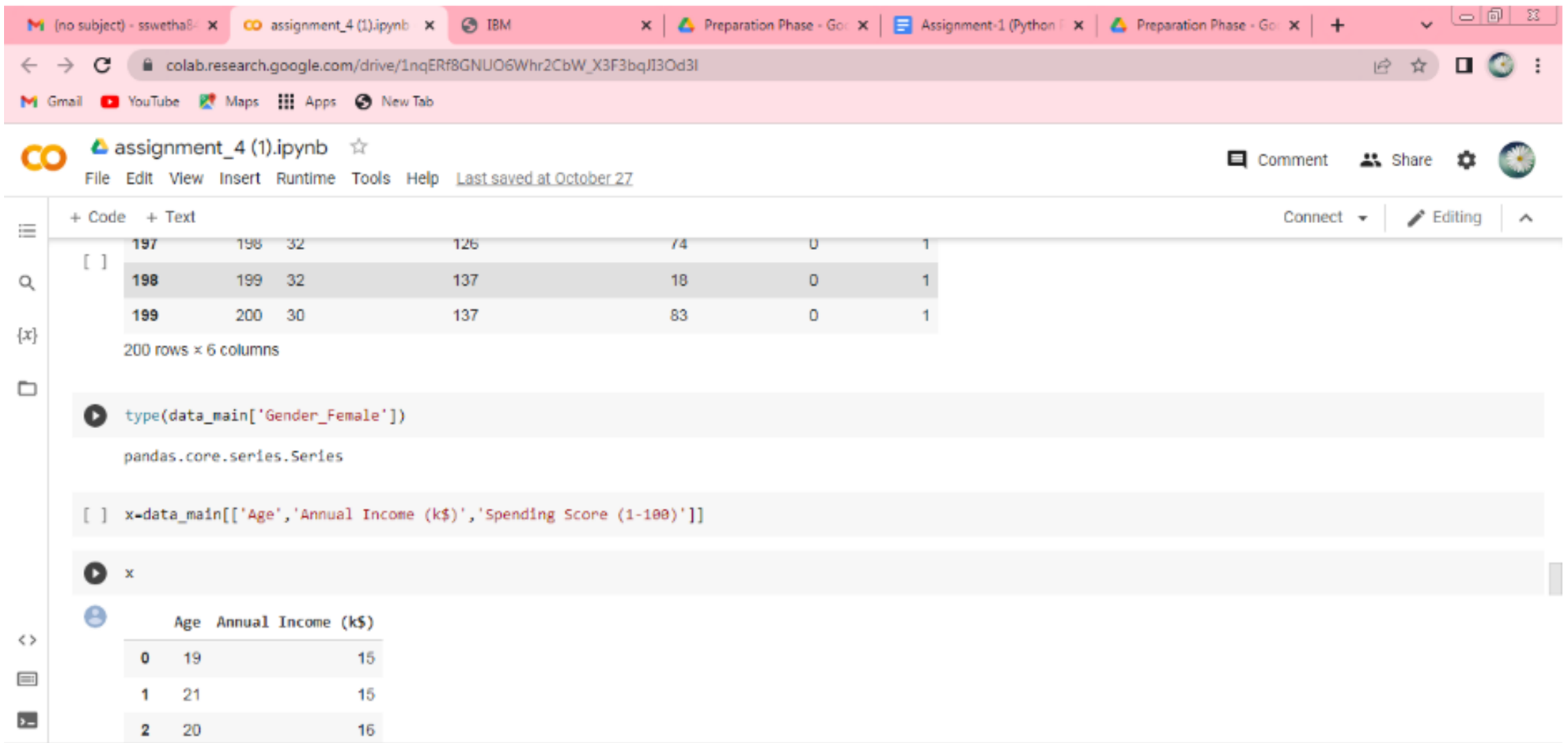
assignment_4 (1)....ipynb | assignment_4 (1).ipynb | Assignment2K.docx | Show all

11:38 AM 10/26/2022





	CustomerID	Age	Annual Income (k$)	Spending Score (1-100)	Gender_Female	Gender_Male
0	1	19	15	39	0	1
1	2	21	15	81	0	1
2	3	20	16	6	1	0
3	4	23	16	77	1	0
4	5	31	17	40	1	0
...	...	...	...	...	...	...
195	196	35	120	79	1	0
196	197	45	126	28	1	0
197	198	32	126	74	0	1
198	199	32	137	18	0	1



197	198	32	126	74	0	1
198	199	32	137	18	0	1
199	200	30	137	83	0	1

200 rows × 6 columns

```
type(data_main['Gender_Female'])
```

```
pandas.core.series.Series
```

```
x=data_main[['Age','Annual Income (k$)','Spending Score (1-100)']]
```

```
x
```

	Age	Annual Income (k$)
0	19	15
1	21	15
2	20	16
...	...	...
195	35	120
196	45	126
197	32	126
198	32	137
199	30	137

200 rows × 2 columns

```
#8 scaling
min_max=MinMaxScaler(feature_range=(0,1))
```

```
norm=min_max.fit_transform(x)
```

```
norm
```

```
array([[0.01923077, 0.        , 0.3877551 ],
```

(no subject) - sswetha8 | assignment_4 (1).ipynb | IBM | Preparation Phase - Go | Assignment-1 (Python | Preparation Phase - Go

colab.research.google.com/drive/1nqERf8GNUO6Whr2CbW_X3F3bqJI3Od3I

Gmail YouTube Maps Apps New Tab

assignment_4 (1).ipynb

File Edit View Insert Runtime Tools Help Last saved at October 27

Comment Share

+ Code + Text

Connect Editing

```
[ ] norm=min_max.fit_transform(x)

norm
```

```
array([[0.01923077, 0.        , 0.3877551 ],
       [0.05769231, 0.        , 0.81632653],
       [0.03846154, 0.00819672, 0.05102041],
       [0.09615385, 0.00819672, 0.7755102 ],
       [0.25      , 0.01639344, 0.39795918],
       [0.07692308, 0.01639344, 0.76530612],
       [0.32692308, 0.02459016, 0.05102041],
       [0.09615385, 0.02459016, 0.94897959],
       [0.88461538, 0.03278689, 0.02040816],
       [0.23076923, 0.03278689, 0.7244898 ],
       [0.94230769, 0.03278689, 0.13265306],
       [0.32692308, 0.03278689, 1.        ],
       [0.76923077, 0.04098361, 0.14285714],
       [0.11538462, 0.04098361, 0.7755102 ],
       [0.36538462, 0.04098361, 0.12244898],
       [0.07692308, 0.04098361, 0.79591837],
       [0.32692308, 0.04918033, 0.34693878],
       [0.03846154, 0.04918033, 0.66326531],
       [0.65384615, 0.06557377, 0.28571429],
```

assignment_4 (1)....ipynb | assignment_4 (1).ipynb | Assignment2K.docx | Show all

11:39 AM 10/26/2022

(no subject) - sswetha8 | assignment_4 (1).ipynb | IBM | Preparation Phase - Go | Assignment-1 (Python | Preparation Phase - Go

colab.research.google.com/drive/1nqERf8GNUO6Whr2CbW_X3F3bqJI3Od3I

Gmail YouTube Maps Apps New Tab

assignment_4 (1).ipynb

File Edit View Insert Runtime Tools Help Last saved at October 27

Comment Share

+ Code + Text

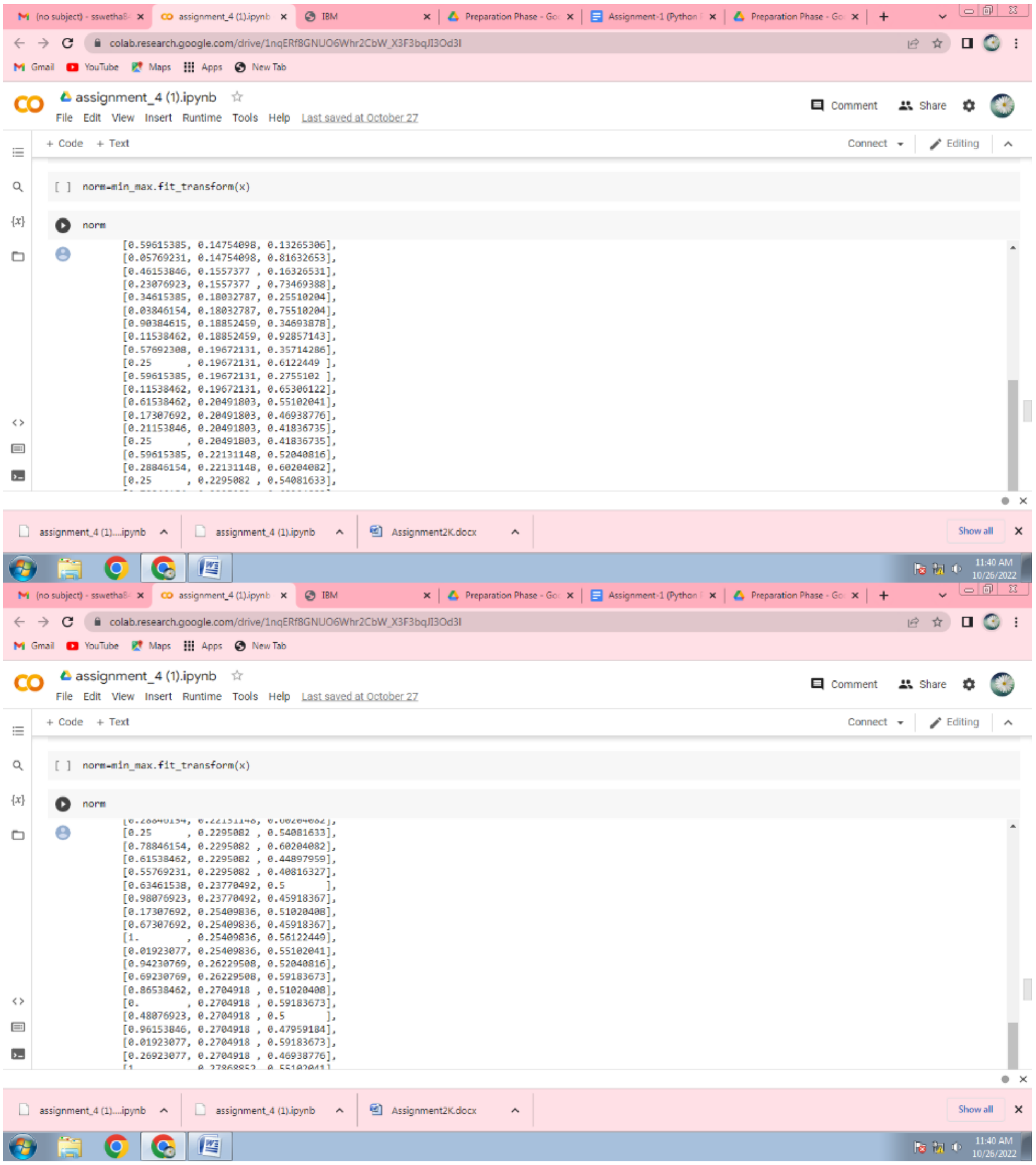
Connect Editing

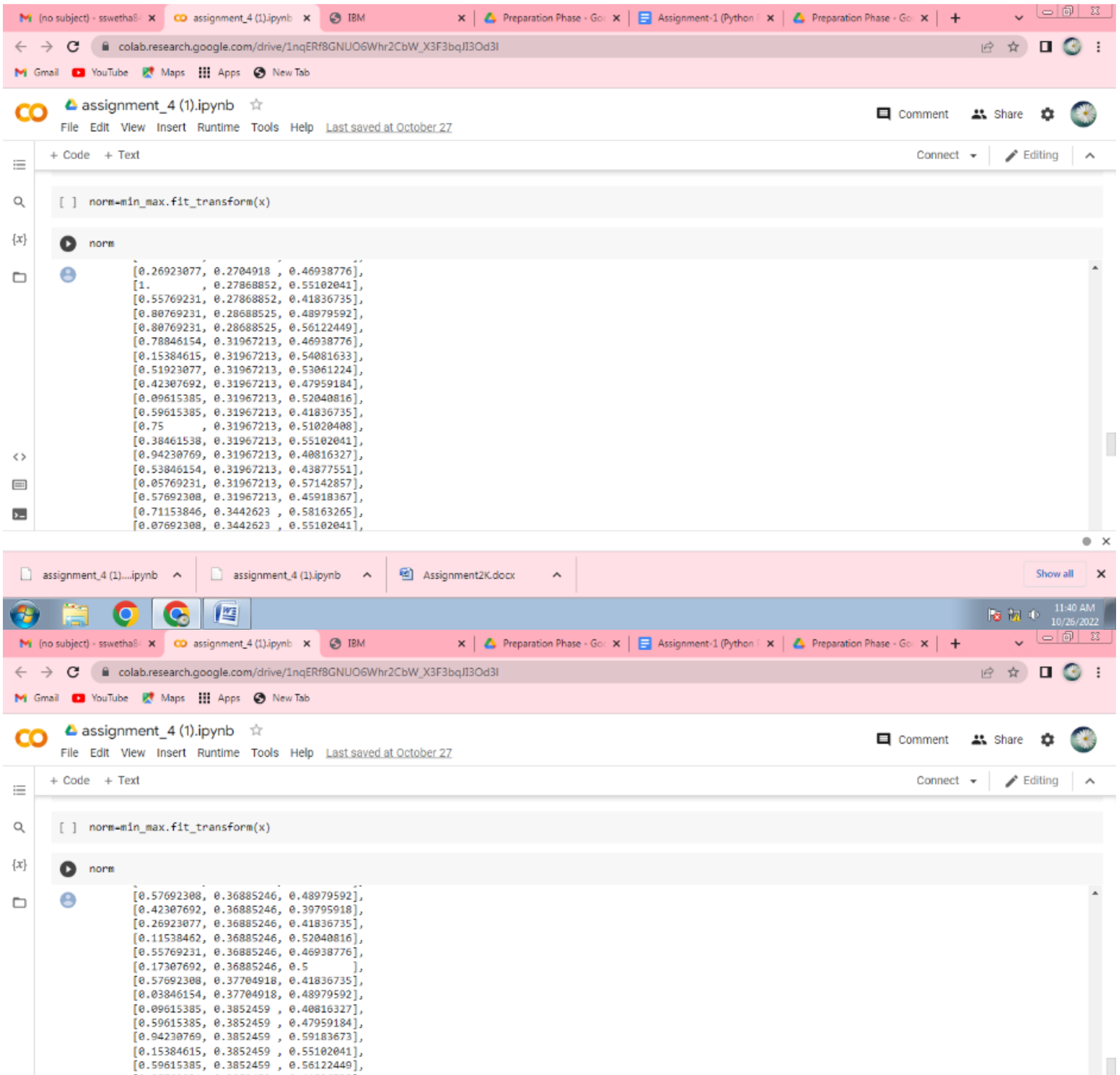
```
[ ] norm=min_max.fit_transform(x)

norm
```

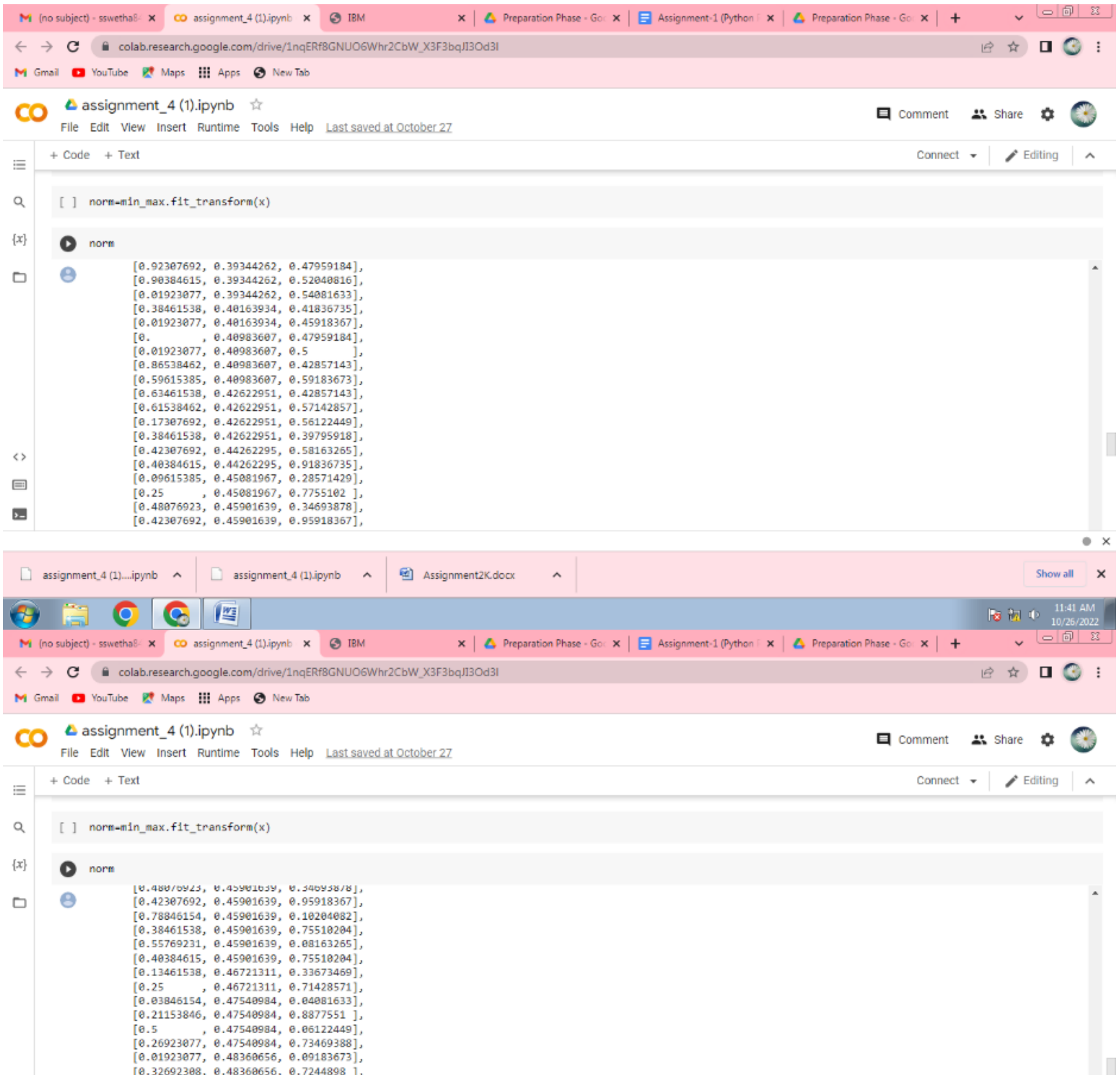
```
       [0.03846154, 0.04918033, 0.66326531],
       [0.65384615, 0.06557377, 0.28571429],
       [0.32692308, 0.06557377, 0.98979592],
       [0.32692308, 0.07377049, 0.34693878],
       [0.13461538, 0.07377049, 0.73469388],
       [0.53846154, 0.08196721, 0.04081633],
       [0.25      , 0.08196721, 0.73469388],
       [0.69230769, 0.10655738, 0.13265306],
       [0.21153846, 0.10655738, 0.82653061],
       [0.51923077, 0.10655738, 0.31632653],
       [0.32692308, 0.10655738, 0.6122449 ],
       [0.42307692, 0.1147541 , 0.30612245],
       [0.09615385, 0.1147541 , 0.87755102],
       [0.80769231, 0.12295082, 0.03061224],
       [0.05769231, 0.12295082, 0.73469388],
       [0.67307692, 0.14754098, 0.03061224],
       [0.        , 0.14754098, 0.92857143],
       [0.59615385, 0.14754098, 0.13265306],
       [0.05769231, 0.14754098, 0.81632653],
```

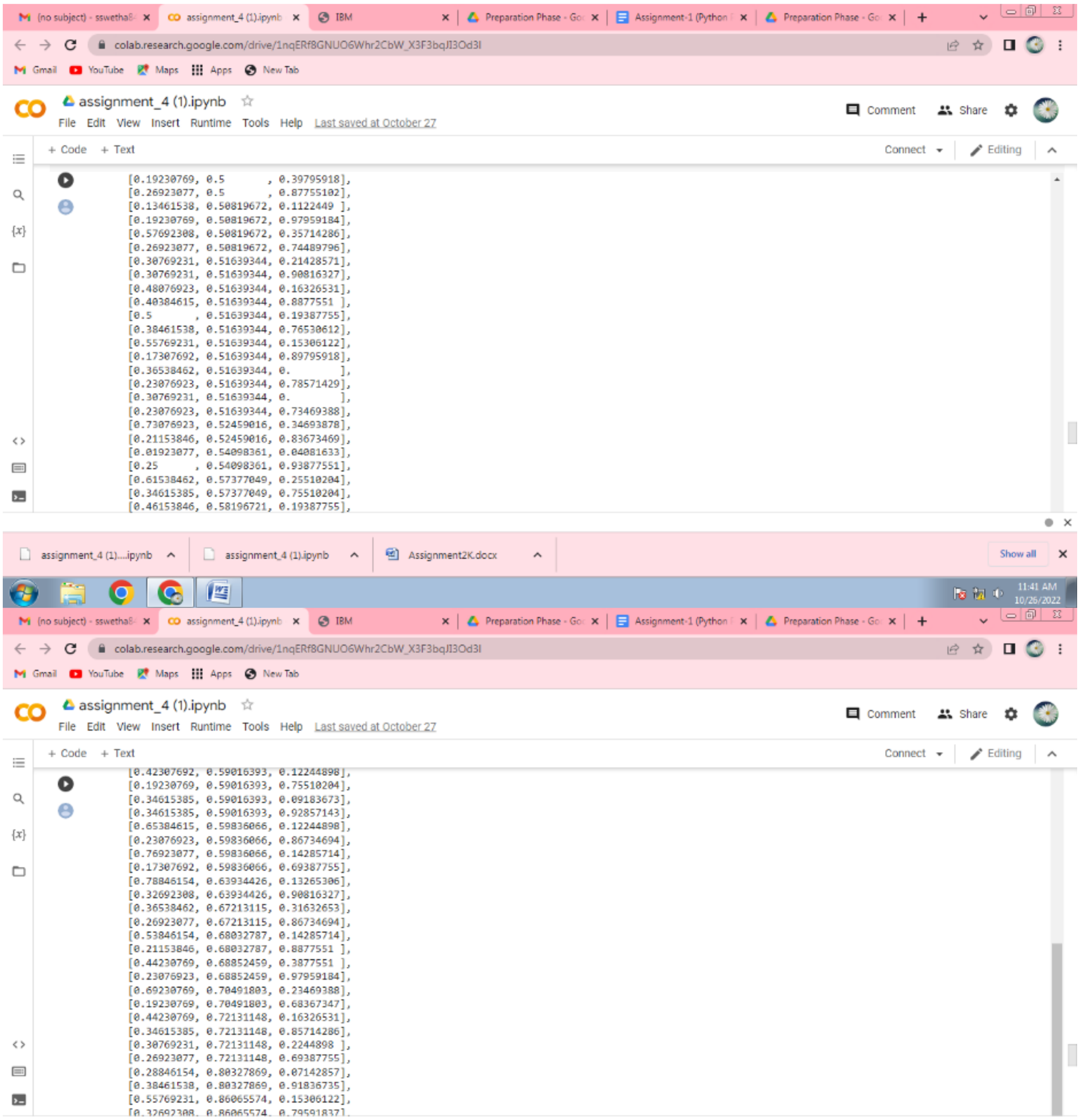
assignment_4 (1)....ipynb | assignment_4 (1).ipynb | Assignment2K.docx | Show all

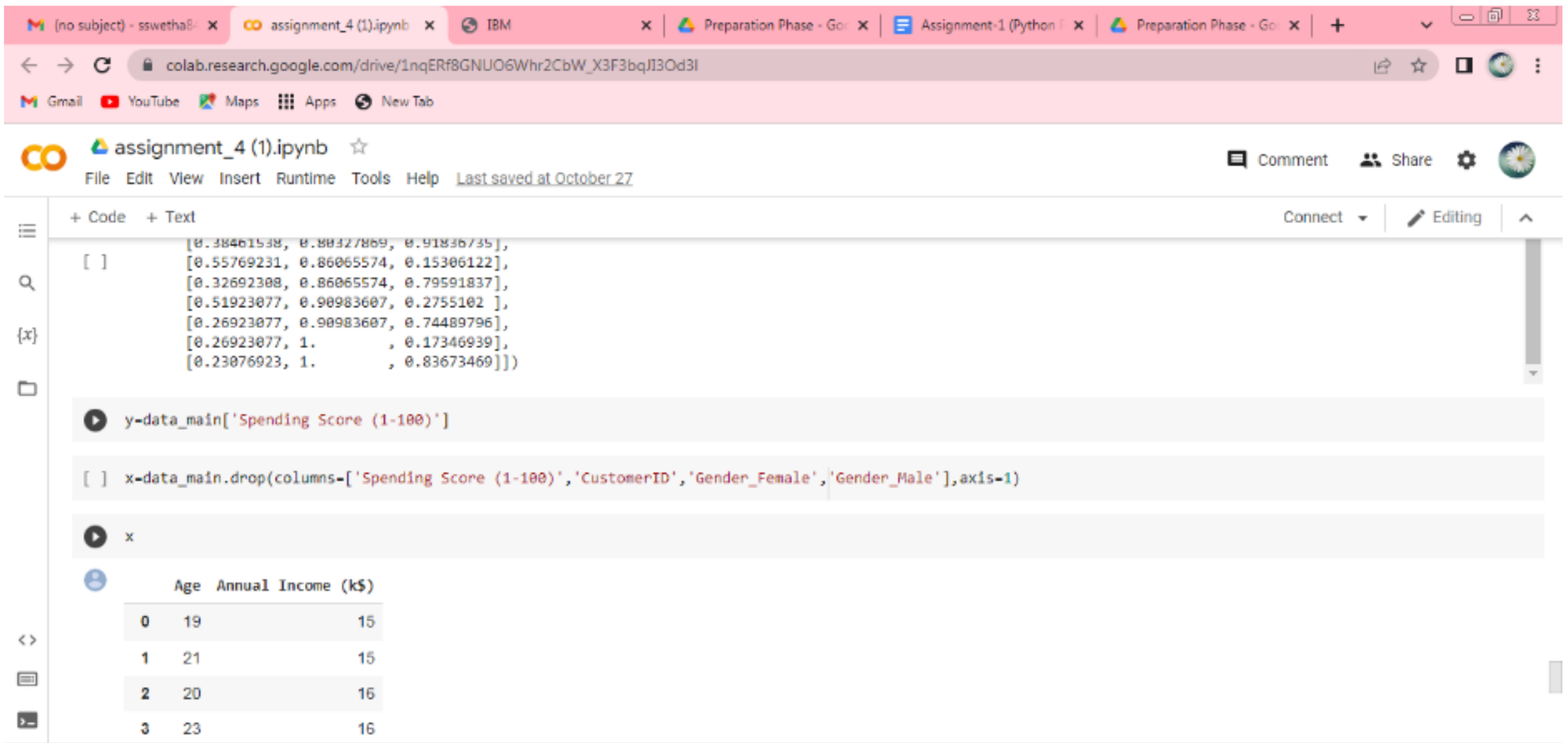
11:40 AM 10/26/2022

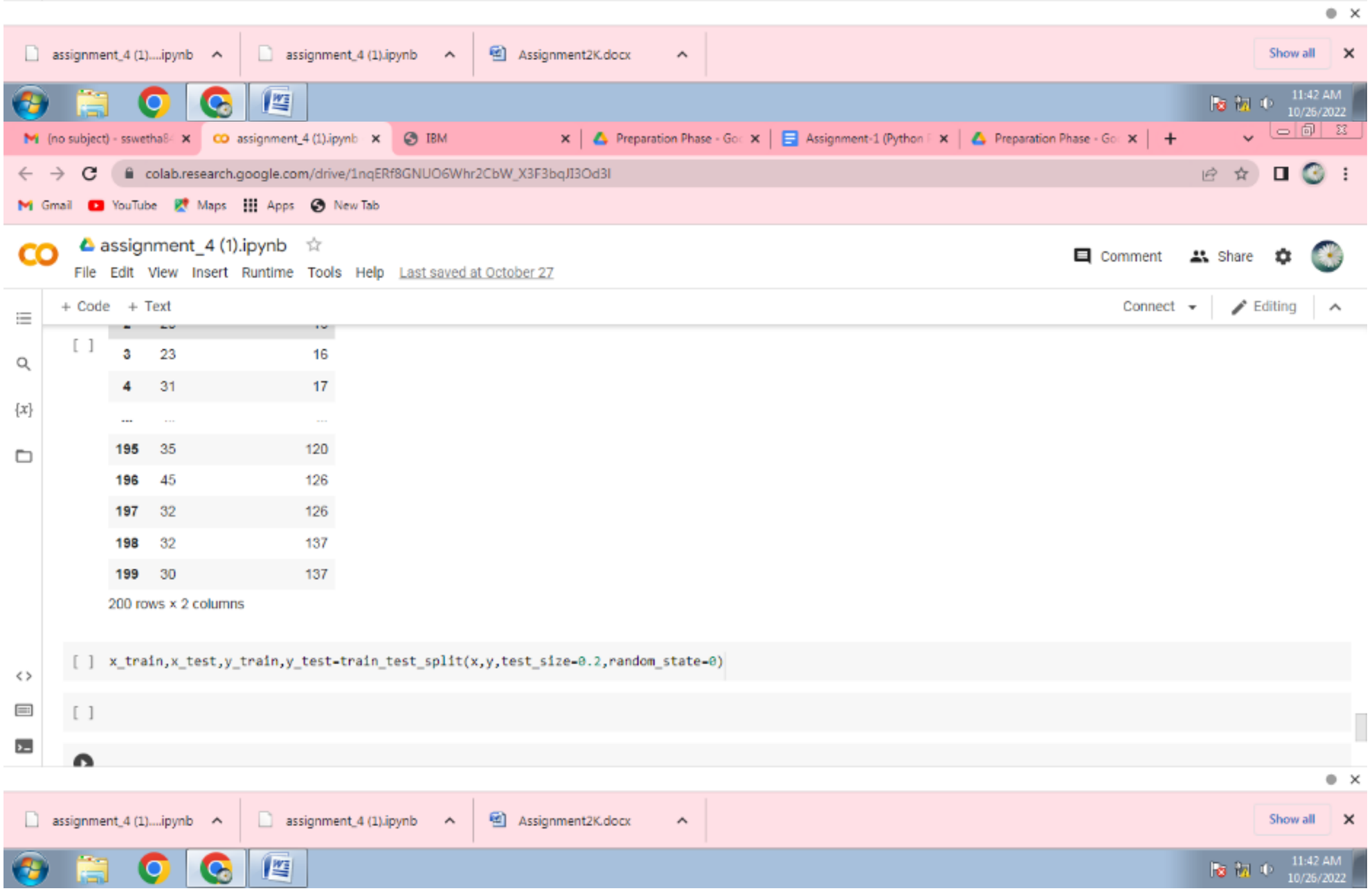

colab.research.google.com/drive/1nqERf8GNUO6Whr2CbW_X3F3bqJI3Od3I
assignment_4 (1).ipynb
File Edit View Insert Runtime Tools Help Last saved at October 27
Comment
Share
Connect
Editing
+ Code + Text
[ ] norm=min_max.fit_transform(x)
norm
[0.59615385, 0.14754098, 0.13265306],
[0.05769231, 0.14754098, 0.81632653],
[0.46153846, 0.1557377 , 0.16326531],
[0.23076923, 0.1557377 , 0.73469388],
[0.34615385, 0.18032787, 0.25510204],
[0.03846154, 0.18032787, 0.75510204],
[0.90384615, 0.18852459, 0.34693878],
[0.11538462, 0.18852459, 0.92857143],
[0.57692308, 0.19672131, 0.35714286],
[0.25 , 0.19672131, 0.6122449],
[0.59615385, 0.19672131, 0.2755102],
[0.11538462, 0.19672131, 0.65306122],
[0.61538462, 0.20491803, 0.55102041],
[0.17307692, 0.20491803, 0.46938776],
[0.21153846, 0.20491803, 0.41836735],
[0.25 , 0.20491803, 0.41836735],
[0.59615385, 0.22131148, 0.52040816],
[0.28846154, 0.22131148, 0.60204082],
[0.25 , 0.2295082 , 0.54081633],
assignment_4 (1)....ipynb
assignment_4 (1).ipynb
Assignment2K.docx
Show all
11:40 AM
10/26/2022
(no subject) - sswetha8
IBM
Preparation Phase - Go
Assignment-1 (Python
Gmail
YouTube
Maps
Apps
New Tab
[0.25 , 0.2295082 , 0.54081633],
[0.78846154, 0.2295082 , 0.60204082],
[0.61538462, 0.2295082 , 0.44897959],
[0.55769231, 0.2295082 , 0.40816327],
[0.63461538, 0.23770492, 0.5],
[0.98076923, 0.23770492, 0.45918367],
[0.17307692, 0.25409836, 0.51020408],
[0.67307692, 0.25409836, 0.45918367],
[1. , 0.25409836, 0.56122449],
[0.01923077, 0.25409836, 0.55102041],
[0.94230769, 0.26229508, 0.52040816],
[0.69230769, 0.26229508, 0.59183673],
[0.86538462, 0.2704918 , 0.51020408],
[0. , 0.2704918 , 0.59183673],
[0.48076923, 0.2704918 , 0.5],
[0.96153846, 0.2704918 , 0.47959184],
[0.01923077, 0.2704918 , 0.59183673],
[0.26923077, 0.2704918 , 0.46938776],


(no subject) - sswetha8
assignment_4 (1).ipynb
IBM
Preparation Phase - Go
Assignment-1 (Python
Preparation Phase - Go
colab.research.google.com/drive/1nqERf8GNUO6Whr2CbW_X3F3bqJI3Od3I
Gmail
YouTube
Maps
Apps
New Tab
assignment_4 (1).ipynb
File Edit View Insert Runtime Tools Help Last saved at October 27
Comment
Share
+ Code + Text
Connect
Editing
[ ] norm=min_max.fit_transform(x)
norm
[0.26923077, 0.2704918 , 0.46938776],
[1. , 0.27868852, 0.55102041],
[0.55769231, 0.27868852, 0.41836735],
[0.80769231, 0.28688525, 0.48979592],
[0.80769231, 0.28688525, 0.56122449],
[0.78846154, 0.31967213, 0.46938776],
[0.15384615, 0.31967213, 0.54081633],
[0.51923077, 0.31967213, 0.53061224],
[0.42307692, 0.31967213, 0.47959184],
[0.09615385, 0.31967213, 0.52040816],
[0.59615385, 0.31967213, 0.41836735],
[0.75 , 0.31967213, 0.51020408],
[0.38461538, 0.31967213, 0.55102041],
[0.94230769, 0.31967213, 0.40816327],
[0.53846154, 0.31967213, 0.43877551],
[0.05769231, 0.31967213, 0.57142857],
[0.57692308, 0.31967213, 0.45918367],
[0.71153846, 0.3442623 , 0.58163265],
[0.07692308, 0.3442623 , 0.55102041],
assignment_4 (1)....ipynb
assignment_4 (1).ipynb
Assignment2K.docx
Show all
11:40 AM
10/26/2022
(no subject) - sswetha8
assignment_4 (1).ipynb
IBM
Preparation Phase - Go
Assignment-1 (Python
Preparation Phase - Go
colab.research.google.com/drive/1nqERf8GNUO6Whr2CbW_X3F3bqJI3Od3I
Gmail
YouTube
Maps
Apps
New Tab
assignment_4 (1).ipynb
File Edit View Insert Runtime Tools Help Last saved at October 27
Comment
Share
+ Code + Text
Connect
Editing
[ ] norm=min_max.fit_transform(x)
norm
[0.57692308, 0.36885246, 0.48979592],
[0.42307692, 0.36885246, 0.39795918],
[0.26923077, 0.36885246, 0.41836735],
[0.11538462, 0.36885246, 0.52040816],
[0.55769231, 0.36885246, 0.46938776],
[0.17307692, 0.36885246, 0.5],
[0.57692308, 0.37704918, 0.41836735],
[0.03846154, 0.37704918, 0.48979592],
[0.09615385, 0.3852459 , 0.40816327],
[0.59615385, 0.3852459 , 0.47959184],
[0.94230769, 0.3852459 , 0.59183673],
[0.15384615, 0.3852459 , 0.55102041],
[0.59615385, 0.3852459 , 0.56122449],
[0.05769231, 0.3852459 , 0.41836735],
[0.92307692, 0.39344262, 0.5],
[0.69230769, 0.39344262, 0.45918367],
[0.96153846, 0.39344262, 0.42857143],
[0.92307692, 0.39344262, 0.47959184],
[0.90384615, 0.39344262, 0.52040816],
assignment_4 (1)....ipynb
assignment_4 (1).ipynb
Assignment2K.docx
Show all
11:41 AM
10/26/2022

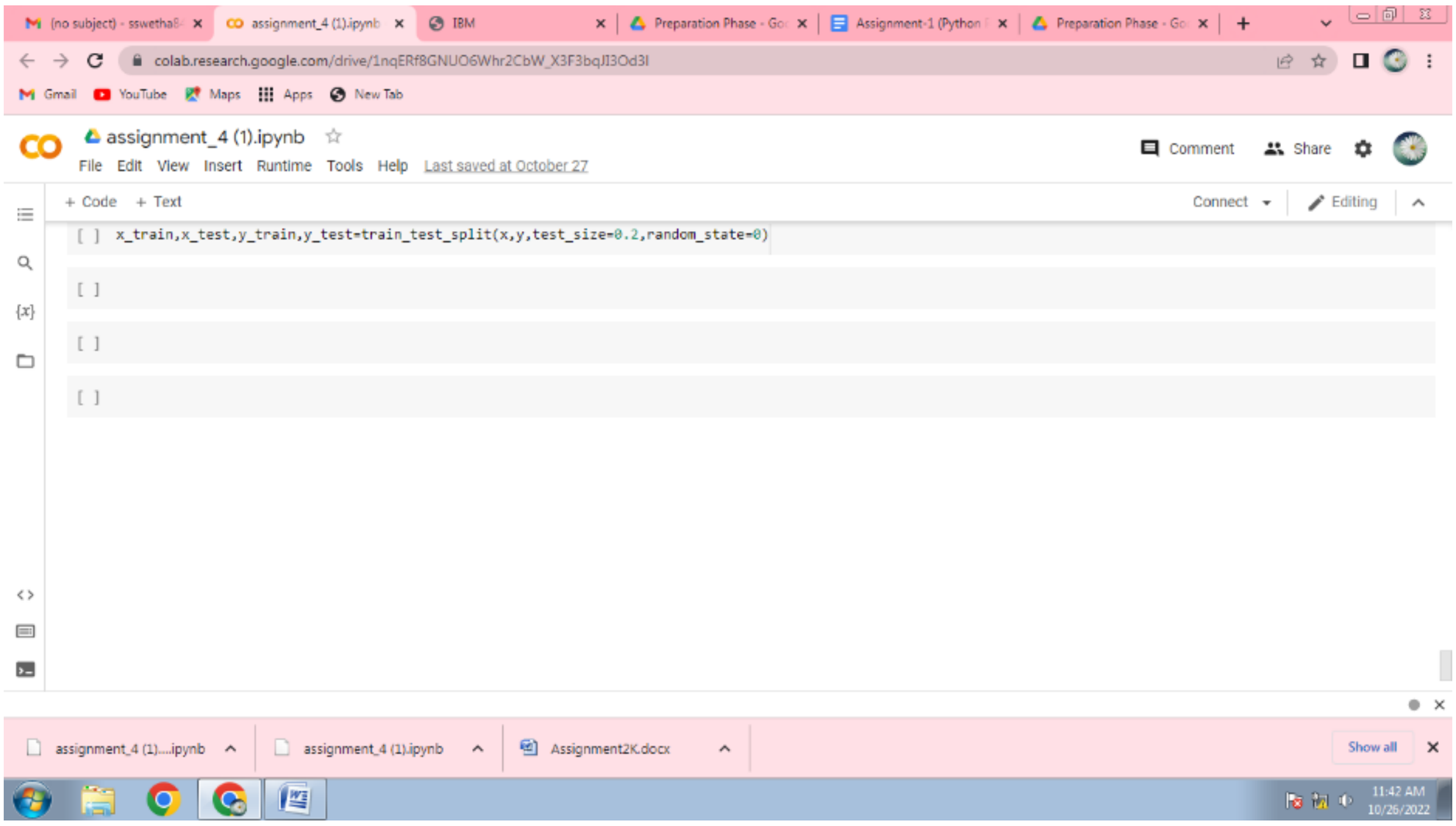

colab.research.google.com/drive/1nqERf8GNUO6Whr2CbW_X3F3bqJI3Od3I
assignment_4 (1).ipynb
File Edit View Insert Runtime Tools Help Last saved at October 27
Comment
Share
Connect
Editing
+ Code + Text
[ ] norm=min_max.fit_transform(x)
norm
[0.92307692, 0.39344262, 0.47959184],
[0.90384615, 0.39344262, 0.52040816],
[0.01923077, 0.39344262, 0.54081633],
[0.38461538, 0.40163934, 0.41836735],
[0.01923077, 0.40163934, 0.45918367],
[0. , 0.40983607, 0.47959184],
[0.01923077, 0.40983607, 0.5],
[0.86538462, 0.40983607, 0.42857143],
[0.59615385, 0.40983607, 0.59183673],
[0.63461538, 0.42622951, 0.42857143],
[0.61538462, 0.42622951, 0.57142857],
[0.17307692, 0.42622951, 0.56122449],
[0.38461538, 0.42622951, 0.39795918],
[0.42307692, 0.44262295, 0.58163265],
[0.40384615, 0.44262295, 0.91836735],
[0.09615385, 0.45081967, 0.28571429],
[0.25 , 0.45081967, 0.7755102],
[0.48076923, 0.45901639, 0.34693878],
[0.42307692, 0.45901639, 0.95918367],
assignment_4 (1)....ipynb
assignment_4 (1).ipynb
Assignment2K.docx
Show all
11:41 AM
10/26/2022
[0.78846154, 0.45901639, 0.10204082],
[0.38461538, 0.45901639, 0.75510204],
[0.55769231, 0.45901639, 0.08163265],
[0.40384615, 0.45901639, 0.75510204],
[0.13461538, 0.46721311, 0.33673469],
[0.25 , 0.46721311, 0.71428571],
[0.03846154, 0.47540984, 0.04081633],
[0.21153846, 0.47540984, 0.8877551],
[0.5 , 0.47540984, 0.06122449],
[0.26923077, 0.47540984, 0.73469388],
[0.01923077, 0.48360656, 0.09183673],
[0.32692308, 0.48360656, 0.7244898],
[0.75 , 0.49180328, 0.04081633],
[0.26923077, 0.49180328, 0.93877551],
[0.19230769, 0.5 , 0.39795918],
[0.26923077, 0.5 , 0.87755102],
[0.13461538, 0.50819672, 0.1122449],


assignment_4 (1).ipynb
File Edit View Insert Runtime Tools Help Last saved at October 27
Comment
Share
+ Code + Text
Connect
Editing
[0.19230769, 0.5 , 0.39795918],
[0.26923077, 0.5 , 0.87755102],
[0.13461538, 0.50819672, 0.1122449],
[0.19230769, 0.50819672, 0.97959184],
[0.57692308, 0.50819672, 0.35714286],
[0.26923077, 0.50819672, 0.74489796],
[0.30769231, 0.51639344, 0.21428571],
[0.30769231, 0.51639344, 0.90816327],
[0.48076923, 0.51639344, 0.16326531],
[0.40384615, 0.51639344, 0.8877551],
[0.5 , 0.51639344, 0.19387755],
[0.38461538, 0.51639344, 0.76530612],
[0.55769231, 0.51639344, 0.15306122],
[0.17307692, 0.51639344, 0.89795918],
[0.36538462, 0.51639344, 0.],
[0.23076923, 0.51639344, 0.78571429],
[0.30769231, 0.51639344, 0.],
[0.23076923, 0.51639344, 0.73469388],
[0.73076923, 0.52459016, 0.34693878],
[0.21153846, 0.52459016, 0.83673469],
[0.01923077, 0.54098361, 0.04081633],
[0.25 , 0.54098361, 0.93877551],
[0.61538462, 0.57377049, 0.25510204],
[0.34615385, 0.57377049, 0.75510204],
[0.46153846, 0.58196721, 0.19387755],
assignment_4 (1)....ipynb
assignment_4 (1).ipynb
Assignment2K.docx
Show all
11:41 AM
10/26/2022
(no subject) - sswetha8
assignment_4 (1).ipynb
IBM
Preparation Phase - Go
Assignment-1 (Python
Preparation Phase - Go
colab.research.google.com/drive/1nqERf8GNUO6Whr2CbW_X3F3bqJI3Od3I
Gmail YouTube Maps Apps New Tab
assignment_4 (1).ipynb
File Edit View Insert Runtime Tools Help Last saved at October 27
Comment
Share
+ Code + Text
Connect
Editing
[0.42307692, 0.59016393, 0.12244898],
[0.19230769, 0.59016393, 0.75510204],
[0.34615385, 0.59016393, 0.09183673],
[0.34615385, 0.59016393, 0.92857143],
[0.65384615, 0.59836066, 0.12244898],
[0.23076923, 0.59836066, 0.86734694],
[0.76923077, 0.59836066, 0.14285714],
[0.17307692, 0.59836066, 0.69387755],
[0.78846154, 0.63934426, 0.13265306],
[0.32692308, 0.63934426, 0.90816327],
[0.36538462, 0.67213115, 0.31632653],
[0.26923077, 0.67213115, 0.86734694],
[0.53846154, 0.68032787, 0.14285714],
[0.21153846, 0.68032787, 0.8877551],
[0.44230769, 0.68852459, 0.3877551],
[0.23076923, 0.68852459, 0.97959184],
[0.69230769, 0.70491803, 0.23469388],
[0.19230769, 0.70491803, 0.68367347],
[0.44230769, 0.72131148, 0.16326531],
[0.34615385, 0.72131148, 0.85714286],
[0.30769231, 0.72131148, 0.2244898],
[0.26923077, 0.72131148, 0.69387755],
[0.28846154, 0.80327869, 0.07142857],
[0.38461538, 0.80327869, 0.91836735],
[0.55769231, 0.86065574, 0.15306122],
assignment_4 (1)....ipynb
assignment_4 (1).ipynb
Assignment2K.docx
Show all
11:42 AM
10/26/2022


(no subject) - sswetha8
assignment_4 (1).ipynb
IBM
Preparation Phase - Go
Assignment-1 (Python
Preparation Phase - Go
colab.research.google.com/drive/1nqERf8GNUO6Whr2CbW_X3F3bqJI3Od3I
Gmail
YouTube
Maps
Apps
New Tab
assignment_4 (1).ipynb
File Edit View Insert Runtime Tools Help Last saved at October 27
Comment
Share
+ Code + Text
Connect
Editing
[ ] [0.38461538, 0.80327869, 0.91836735],
[0.55769231, 0.86065574, 0.15306122],
[0.32692308, 0.86065574, 0.79591837],
[0.51923077, 0.90983607, 0.2755102],
[0.26923077, 0.90983607, 0.74489796],
[0.26923077, 1. , 0.17346939],
[0.23076923, 1. , 0.83673469]])
y=data_main['Spending Score (1-100)']
[ ] x=data_main.drop(columns=['Spending Score (1-100)','CustomerID','Gender_Female','Gender_Male'],axis=1)
x
Age Annual Income (k$)
0 19 15
1 21 15
2 20 16
3 23 16


assignment_4 (1)....ipynb
assignment_4 (1).ipynb
Assignment2K.docx
Show all
11:42 AM
10/26/2022
(no subject) - sswetha8
assignment_4 (1).ipynb
IBM
Preparation Phase - Go
Assignment-1 (Python
Preparation Phase - Go
colab.research.google.com/drive/1nqERf8GNUO6Whr2CbW_X3F3bqJI3Od3I
Gmail
YouTube
Maps
Apps
New Tab
assignment_4 (1).ipynb
File Edit View Insert Runtime Tools Help Last saved at October 27
Comment
Share
+ Code + Text
Connect
Editing
[ ] 3 23 16
4 31 17
... ...
195 35 120
196 45 126
197 32 126
198 32 137
199 30 137
200 rows x 2 columns
[ ] x_train,x_test,y_train,y_test=train_test_split(x,y,test_size=0.2,random_state=0)
[ ]

assignment_4 (1)....ipynb
assignment_4 (1).ipynb
Assignment2K.docx
Show all
11:42 AM
10/26/2022


(no subject) - sswetha8
assignment_4 (1).ipynb
IBM
Preparation Phase - Go
Assignment-1 (Python
Preparation Phase - Go
colab.research.google.com/drive/1nqERf8GNUO6Whr2CbW_X3F3bqJI3Od3I
Gmail
YouTube
Maps
Apps
New Tab
assignment_4 (1).ipynb
File Edit View Insert Runtime Tools Help Last saved at October 27
Comment
Share
+ Code + Text
Connect
Editing
[ ] x_train,x_test,y_train,y_test=train_test_split(x,y,test_size=0.2,random_state=0)
[ ]
[ ]
[ ]
assignment_4 (1)....ipynb
assignment_4 (1).ipynb
Assignment2K.docx
Show all
11:42 AM
10/26/2022