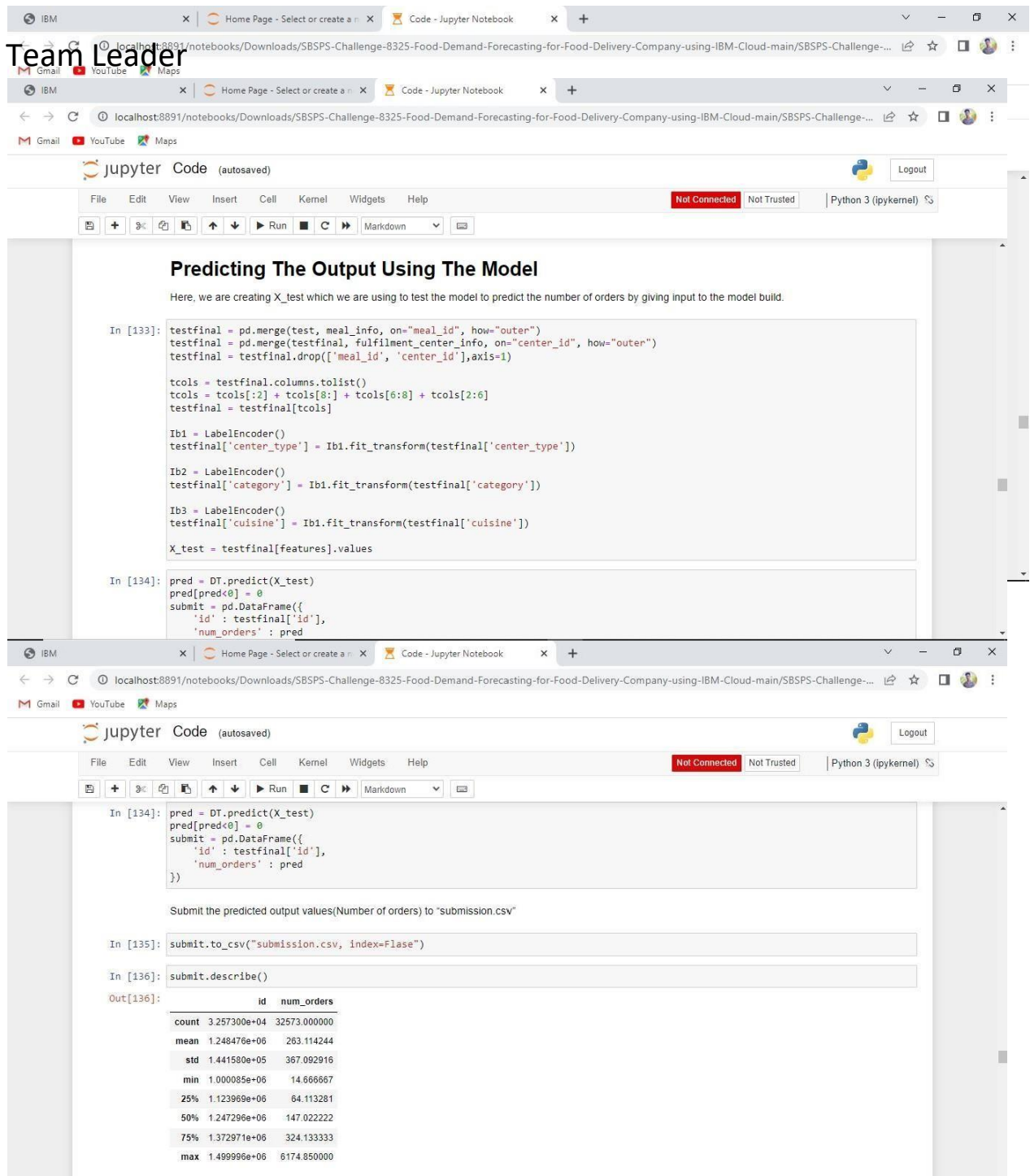


**TEAM ID :
PNT2022TMID25899**

**PROJECT NAME: Demand Est - AI powered Food Demand
Forecaster**

Team Member 1

Team Leader



The screenshot displays a Jupyter Notebook interface with the following content:

Predicting The Output Using The Model

Here, we are creating `X_test` which we are using to test the model to predict the number of orders by giving input to the model build.

```
In [133]: testfinal = pd.merge(test, meal_info, on="meal_id", how="outer")
testfinal = pd.merge(testfinal, fulfilment_center_info, on="center_id", how="outer")
testfinal = testfinal.drop(['meal_id', 'center_id'], axis=1)

tcols = testfinal.columns.tolist()
tcols = tcols[:2] + tcols[8:] + tcols[6:8] + tcols[2:6]
testfinal = testfinal[tcols]

Ib1 = LabelEncoder()
testfinal['center_type'] = Ib1.fit_transform(testfinal['center_type'])

Ib2 = LabelEncoder()
testfinal['category'] = Ib1.fit_transform(testfinal['category'])

Ib3 = LabelEncoder()
testfinal['cuisine'] = Ib1.fit_transform(testfinal['cuisine'])

X_test = testfinal[features].values

In [134]: pred = DT.predict(X_test)
pred[pred<0] = 0
submit = pd.DataFrame({
    'id' : testfinal['id'],
    'num_orders' : pred
})
```

Submit the predicted output values (Number of orders) to "submission.csv"

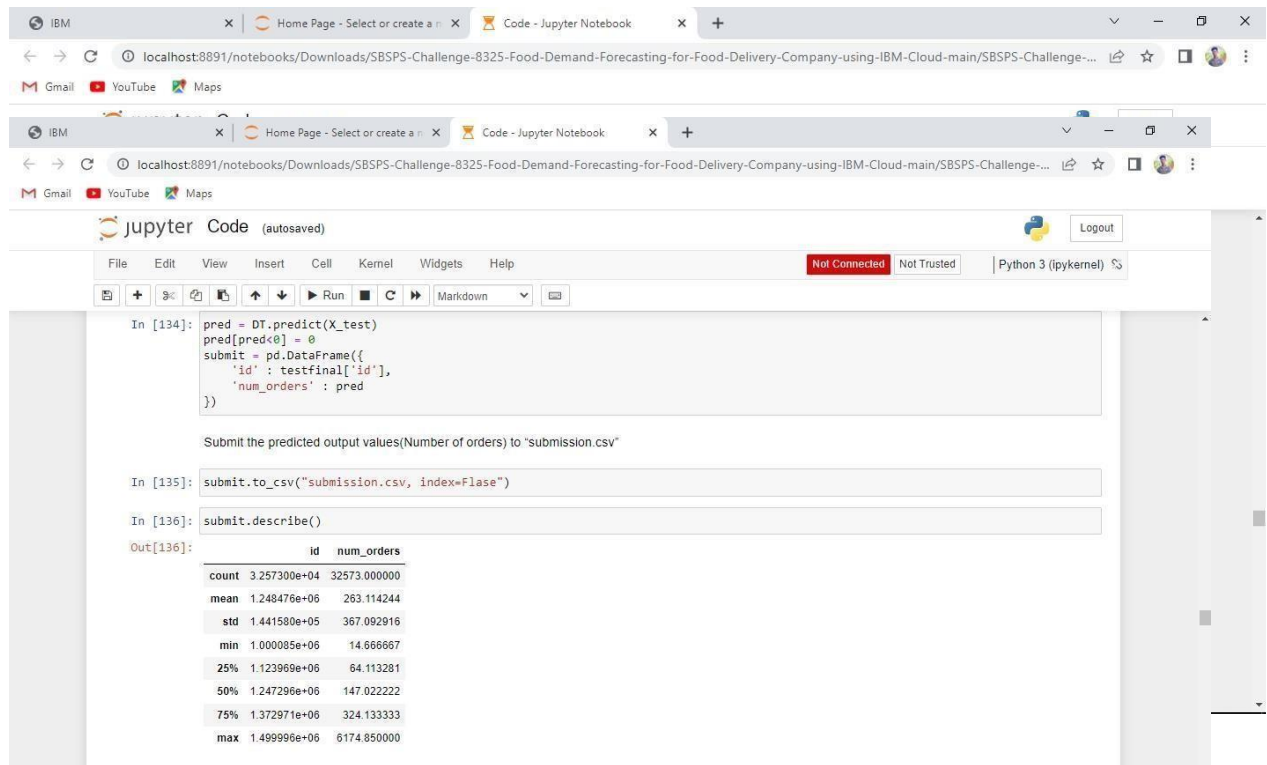
```
In [135]: submit.to_csv("submission.csv", index=False)
```

```
In [136]: submit.describe()
```

Out[136]:

	id	num_orders
count	3.257300e+04	32573.000000
mean	1.248476e+06	263.114244
std	1.441580e+05	367.092916
min	1.000085e+06	14.666667
25%	1.123969e+06	64.113281
50%	1.247296e+06	147.022222
75%	1.372971e+06	324.133333
max	1.499996e+06	6174.850000

Team Member 2



The screenshot displays a Jupyter Notebook interface within a web browser. The browser's address bar shows the URL: `localhost:8891/notebooks/Downloads/SBSPS-Challenge-8325-Food-Demand-Forecasting-for-Food-Delivery-Company-using-IBM-Cloud-main/SBSPS-Challenge-...`. The notebook's title bar indicates it is a "Code - Jupyter Notebook" and is "autosaved". The interface includes a menu bar (File, Edit, View, Insert, Cell, Kernel, Widgets, Help) and a status bar showing "Not Connected", "Not Trusted", and "Python 3 (ipykernel)".

The notebook contains three input cells and one output cell:

- In [134]:** A code cell containing the following Python code:

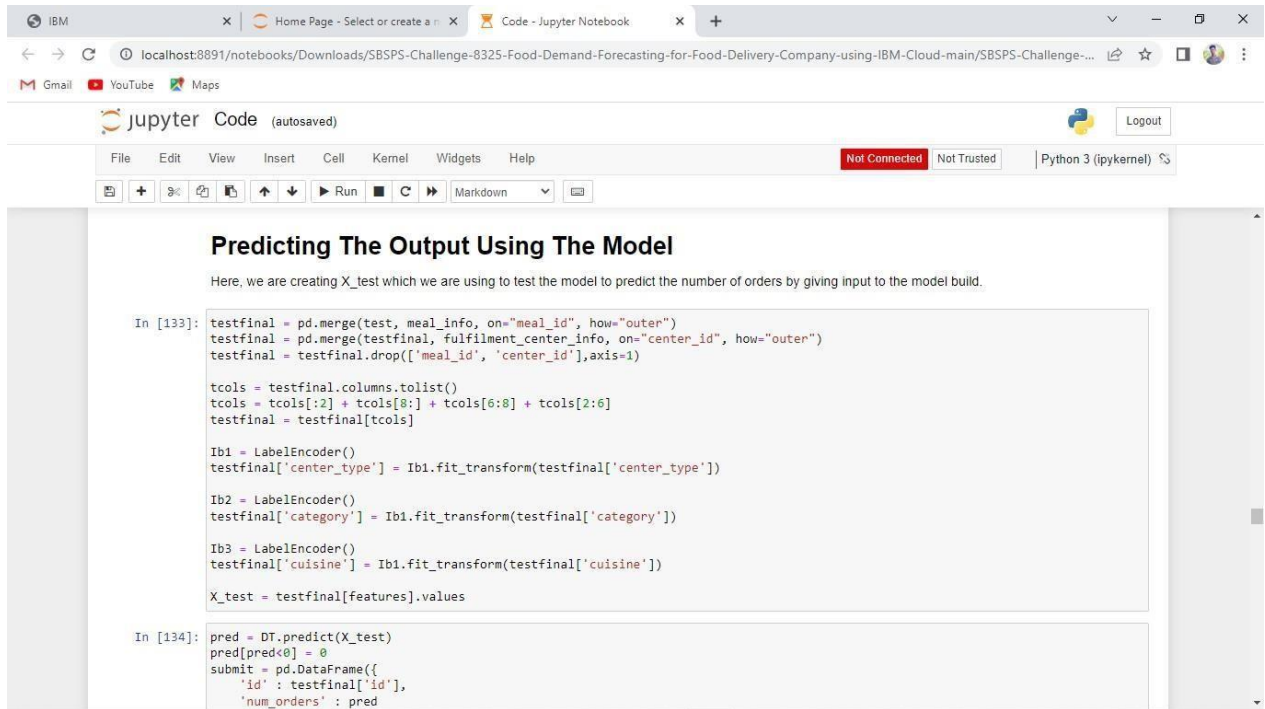
```
pred = DT.predict(X_test)
pred[pred<0] = 0
submit = pd.DataFrame({
    'id' : testfinal['id'],
    'num_orders' : pred
})
```
- Submit the predicted output values(Number of orders) to "submission.csv"** A text prompt.
- In [135]:** A code cell containing the following Python code:

```
submit.to_csv("submission.csv", index=False)
```
- In [136]:** A code cell containing the following Python code:

```
submit.describe()
```
- Out[136]:** An output cell displaying a summary statistics table for the 'submit' DataFrame:

	id	num_orders
count	3.257300e+04	32573.000000
mean	1.248476e+06	263.114244
std	1.441580e+05	367.092916
min	1.000085e+06	14.666667
25%	1.123969e+06	64.113281
50%	1.247296e+06	147.022222
75%	1.372971e+06	324.133333
max	1.499996e+06	6174.850000

Team Member 3



The screenshot shows a Jupyter Notebook titled "Predicting The Output Using The Model". The notebook is running on a local host (localhost:8891) and is using Python 3 (ipykernel). The code in the notebook is as follows:

```
In [133]: testfinal = pd.merge(test, meal_info, on="meal_id", how="outer")
testfinal = pd.merge(testfinal, fulfilment_center_info, on="center_id", how="outer")
testfinal = testfinal.drop(['meal_id', 'center_id'], axis=1)

tcols = testfinal.columns.tolist()
tcols = tcols[:2] + tcols[8:] + tcols[6:8] + tcols[2:6]
testfinal = testfinal[tcols]

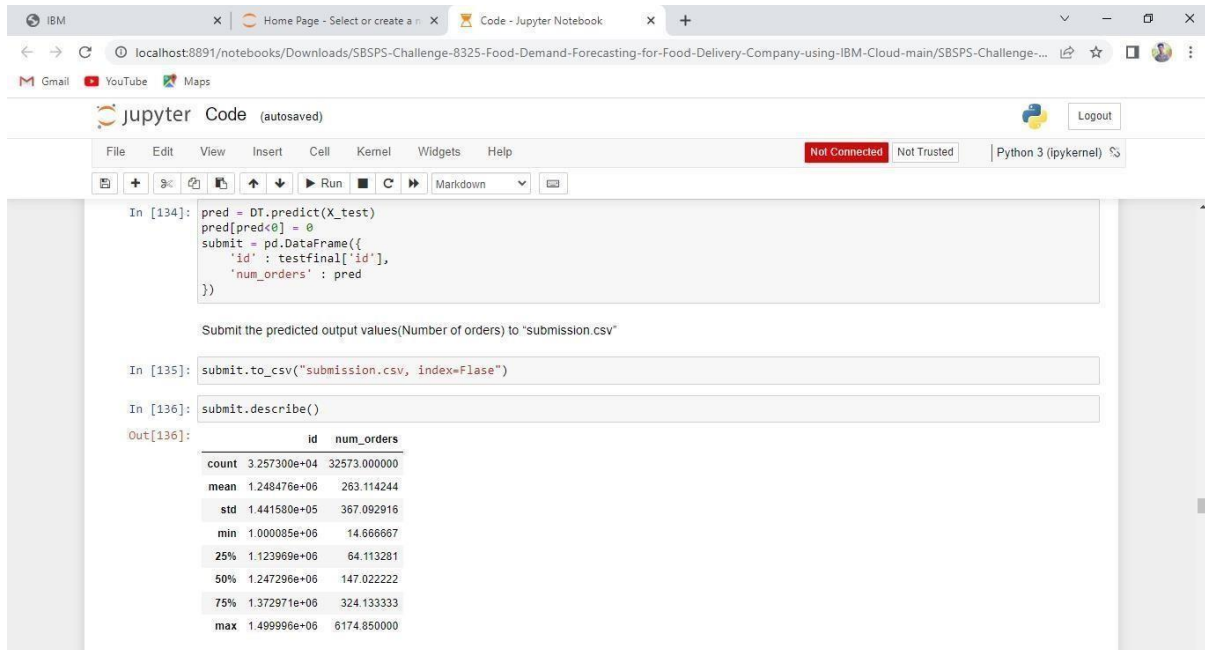
Ib1 = LabelEncoder()
testfinal['center_type'] = Ib1.fit_transform(testfinal['center_type'])

Ib2 = LabelEncoder()
testfinal['category'] = Ib1.fit_transform(testfinal['category'])

Ib3 = LabelEncoder()
testfinal['cuisine'] = Ib1.fit_transform(testfinal['cuisine'])

X_test = testfinal[features].values

In [134]: pred = DT.predict(X_test)
pred[pred<0] = 0
submit = pd.DataFrame({
    'id' : testfinal['id'],
    'num_orders' : pred
})
```



The screenshot shows a Jupyter Notebook interface with the following code and output:

```
In [134]: pred = DT.predict(X_test)
pred[pred<0] = 0
submit = pd.DataFrame({
    'id' : testfinal['id'],
    'num_orders' : pred
})
```

Submit the predicted output values(Number of orders) to "submission.csv"

```
In [135]: submit.to_csv("submission.csv", index=False)
```

```
In [136]: submit.describe()
```

```
Out[136]:
```

	id	num_orders
count	3.257300e+04	32573.000000
mean	1.248476e+06	263.114244
std	1.441580e+05	367.092916
min	1.000085e+06	14.666667
25%	1.123969e+06	64.113281
50%	1.247296e+06	147.022222
75%	1.372971e+06	324.133333
max	1.499996e+06	6174.850000

Team Member 4

The screenshot shows a web browser window with multiple tabs. The active tab is a Jupyter Notebook titled "Code - Jupyter Notebook". The address bar shows the URL: `localhost:8891/notebooks/Downloads/SBSPS-Challenge-8325-Food-Demand-Forecasting-for-Food-Delivery-Company-using-IBM-Cloud-main/SBSPS-Challenge-...`. The Jupyter interface includes a menu bar (File, Edit, View, Insert, Cell, Kernel, Widgets, Help) and a toolbar with icons for file operations, running, and markdown. A status bar at the top right indicates "Not Connected", "Not Trusted", and "Python 3 (ipykernel)".

The notebook contains the following code cells:

```
In [134]: pred = DT.predict(X_test)
pred[pred<0] = 0
submit = pd.DataFrame({
    'id' : testfinal['id'],
    'num_orders' : pred
})
```

Below the code cell, a text instruction reads: "Submit the predicted output values(Number of orders) to 'submission.csv'"

```
In [135]: submit.to_csv("submission.csv", index=False)
```

```
In [136]: submit.describe()
```

The output of the last cell is a summary statistics table:

	id	num_orders
count	3.257300e+04	32573.000000
mean	1.248476e+06	263.114244
std	1.441580e+05	367.092916
min	1.000085e+06	14.666667
25%	1.123969e+06	64.113281
50%	1.247296e+06	147.022222
75%	1.372971e+06	324.133333
max	1.499996e+06	6174.850000