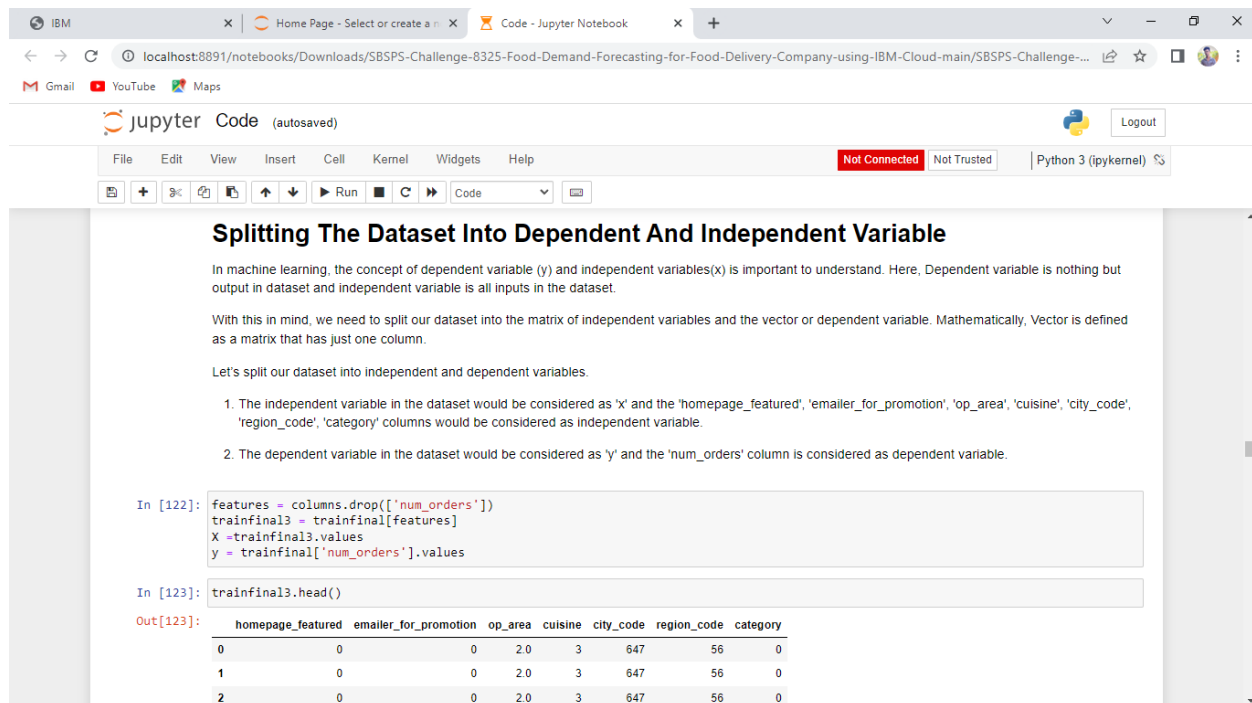


TEAM ID: PNT2022TMID25899

PROJECT NAME: DemandEst - AI powered Food Demand Forecaster

Team Leader



The screenshot shows a Jupyter Notebook interface with the title "Splitting The Dataset Into Dependent And Independent Variable". The notebook contains the following text:

In machine learning, the concept of dependent variable (y) and independent variables(x) is important to understand. Here, Dependent variable is nothing but output in dataset and independent variable is all inputs in the dataset.

With this in mind, we need to split our dataset into the matrix of independent variables and the vector or dependent variable. Mathematically, Vector is defined as a matrix that has just one column.

Let's split our dataset into independent and dependent variables.

1. The independent variable in the dataset would be considered as 'x' and the 'homepage_featured', 'emailer_for_promotion', 'op_area', 'cuisine', 'city_code', 'region_code', 'category' columns would be considered as independent variable.
2. The dependent variable in the dataset would be considered as 'y' and the 'num_orders' column is considered as dependent variable.

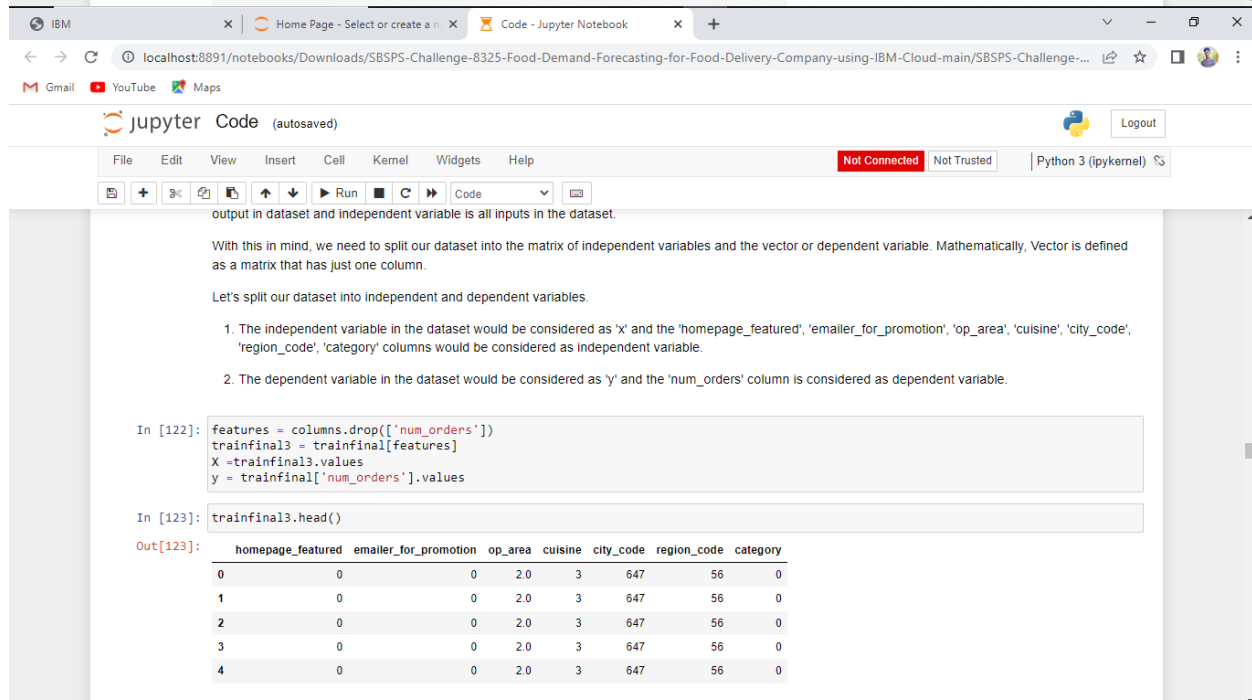
The notebook shows the following code and output:

```
In [122]: features = columns.drop(['num_orders'])
trainfinal3 = trainfinal[features]
X = trainfinal3.values
y = trainfinal['num_orders'].values

In [123]: trainfinal3.head()
```

Out[123]:

	homepage_featured	emailer_for_promotion	op_area	cuisine	city_code	region_code	category
0	0	0	2.0	3	647	56	0
1	0	0	2.0	3	647	56	0
2	0	0	2.0	3	647	56	0

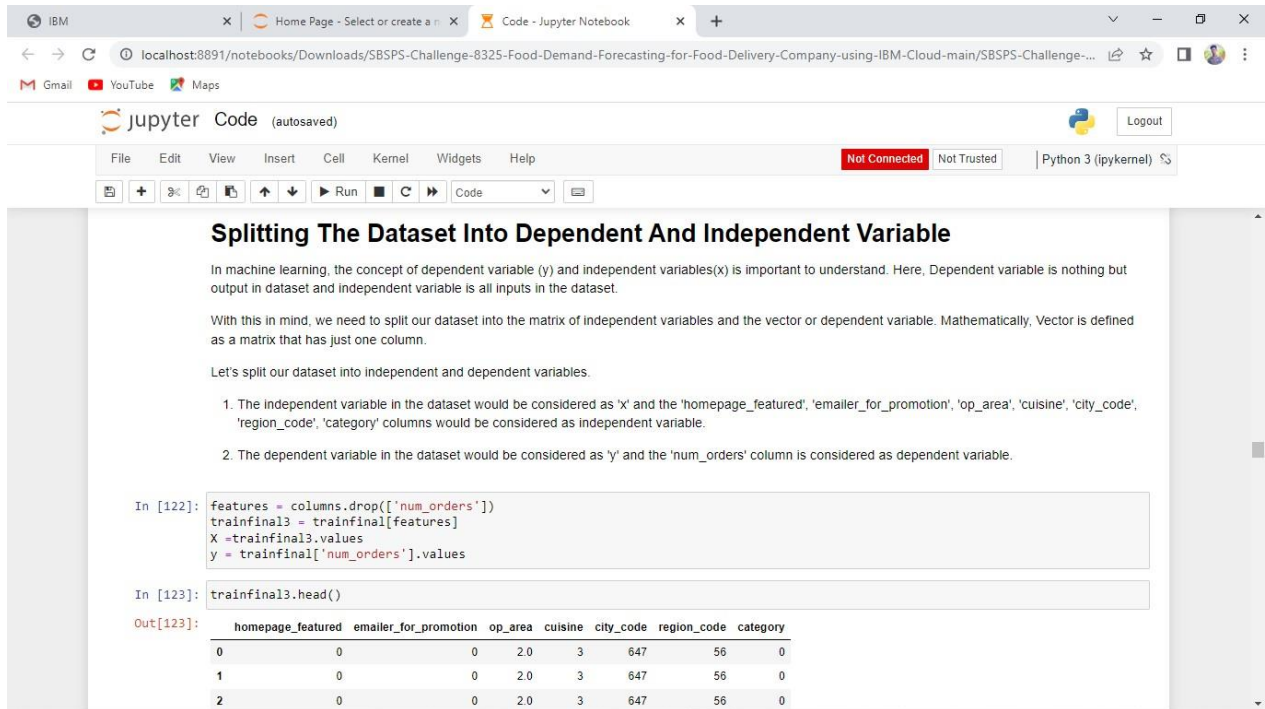


This screenshot is a continuation of the Jupyter Notebook from the previous image. It shows the same code and output, but the output table now includes rows 3 and 4:

Out[123]:

	homepage_featured	emailer_for_promotion	op_area	cuisine	city_code	region_code	category
0	0	0	2.0	3	647	56	0
1	0	0	2.0	3	647	56	0
2	0	0	2.0	3	647	56	0
3	0	0	2.0	3	647	56	0
4	0	0	2.0	3	647	56	0

Team Member 1



The screenshot shows a Jupyter Notebook interface with a browser window at the top. The notebook title is "Splitting The Dataset Into Dependent And Independent Variable". The text explains the importance of splitting a dataset into independent variables (X) and a dependent variable (y). It lists two points: 1. Independent variables include 'homepage_featured', 'emailer_for_promotion', 'op_area', 'cuisine', 'city_code', 'region_code', and 'category'. 2. The dependent variable is 'num_orders'. Below the text, there are two code blocks. The first block (In [122]) shows the code to drop 'num_orders' from the dataset and split it into X and y. The second block (In [123]) shows the code to view the first few rows of the dataset. The output (Out [123]) is a table with 8 columns: homepage_featured, emailer_for_promotion, op_area, cuisine, city_code, region_code, category, and num_orders. The first three rows are shown.

Splitting The Dataset Into Dependent And Independent Variable

In machine learning, the concept of dependent variable (y) and independent variables(x) is important to understand. Here, Dependent variable is nothing but output in dataset and independent variable is all inputs in the dataset.

With this in mind, we need to split our dataset into the matrix of independent variables and the vector or dependent variable. Mathematically, Vector is defined as a matrix that has just one column.

Let's split our dataset into independent and dependent variables.

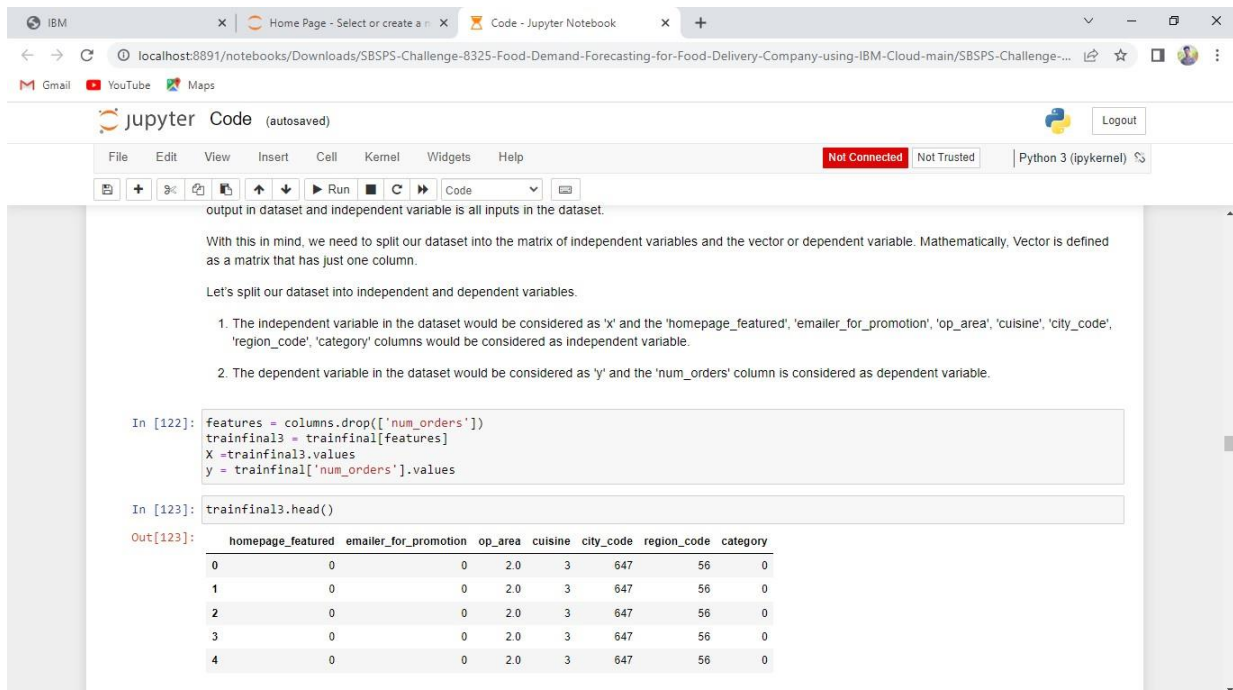
1. The independent variable in the dataset would be considered as 'x' and the 'homepage_featured', 'emailer_for_promotion', 'op_area', 'cuisine', 'city_code', 'region_code', 'category' columns would be considered as independent variable.
2. The dependent variable in the dataset would be considered as 'y' and the 'num_orders' column is considered as dependent variable.

```
In [122]: features = columns.drop(['num_orders'])
trainfinal3 = trainfinal[features]
X = trainfinal3.values
y = trainfinal['num_orders'].values
```

```
In [123]: trainfinal3.head()
```

```
Out[123]:
```

	homepage_featured	emailer_for_promotion	op_area	cuisine	city_code	region_code	category
0	0	0	2.0	3	647	56	0
1	0	0	2.0	3	647	56	0
2	0	0	2.0	3	647	56	0



This screenshot shows the same Jupyter Notebook interface, but with the output of the second code block (In [123]) expanded to show more rows of the dataset. The output (Out [123]) is a table with 8 columns: homepage_featured, emailer_for_promotion, op_area, cuisine, city_code, region_code, category, and num_orders. The first five rows are shown.

output in dataset and independent variable is all inputs in the dataset.

With this in mind, we need to split our dataset into the matrix of independent variables and the vector or dependent variable. Mathematically, Vector is defined as a matrix that has just one column.

Let's split our dataset into independent and dependent variables.

1. The independent variable in the dataset would be considered as 'x' and the 'homepage_featured', 'emailer_for_promotion', 'op_area', 'cuisine', 'city_code', 'region_code', 'category' columns would be considered as independent variable.
2. The dependent variable in the dataset would be considered as 'y' and the 'num_orders' column is considered as dependent variable.

```
In [122]: features = columns.drop(['num_orders'])
trainfinal3 = trainfinal[features]
X = trainfinal3.values
y = trainfinal['num_orders'].values
```

```
In [123]: trainfinal3.head()
```

```
Out[123]:
```

	homepage_featured	emailer_for_promotion	op_area	cuisine	city_code	region_code	category
0	0	0	2.0	3	647	56	0
1	0	0	2.0	3	647	56	0
2	0	0	2.0	3	647	56	0
3	0	0	2.0	3	647	56	0
4	0	0	2.0	3	647	56	0

Team Member 2

IBM Home Page - Select or create a notebook Code - Jupyter Notebook

localhost:8891/notebooks/Downloads/SBSPS-Challenge-8325-Food-Demand-Forecasting-for-Food-Delivery-Company-using-IBM-Cloud-main/SBSPS-Challenge-...

Gmail YouTube Maps

jupyter Code (autosaved) Logout

File Edit View Insert Cell Kernel Widgets Help Not Connected Not Trusted Python 3 (ipykernel)

Splitting The Dataset Into Dependent And Independent Variable

In machine learning, the concept of dependent variable (y) and independent variables(x) is important to understand. Here, Dependent variable is nothing but output in dataset and independent variable is all inputs in the dataset.

With this in mind, we need to split our dataset into the matrix of independent variables and the vector or dependent variable. Mathematically, Vector is defined as a matrix that has just one column.

Let's split our dataset into independent and dependent variables.

1. The independent variable in the dataset would be considered as 'x' and the 'homepage_featured', 'emailer_for_promotion', 'op_area', 'cuisine', 'city_code', 'region_code', 'category' columns would be considered as independent variable.
2. The dependent variable in the dataset would be considered as 'y' and the 'num_orders' column is considered as dependent variable.

```
In [122]: features = columns.drop(['num_orders'])
trainfinal3 = trainfinal[features]
X = trainfinal3.values
y = trainfinal['num_orders'].values
```

```
In [123]: trainfinal3.head()
```

```
Out[123]:
```

	homepage_featured	emailer_for_promotion	op_area	cuisine	city_code	region_code	category
0	0	0	2.0	3	647	56	0
1	0	0	2.0	3	647	56	0
2	0	0	2.0	3	647	56	0

IBM Home Page - Select or create a notebook Code - Jupyter Notebook

localhost:8891/notebooks/Downloads/SBSPS-Challenge-8325-Food-Demand-Forecasting-for-Food-Delivery-Company-using-IBM-Cloud-main/SBSPS-Challenge-...

Gmail YouTube Maps

jupyter Code (autosaved) Logout

File Edit View Insert Cell Kernel Widgets Help Not Connected Not Trusted Python 3 (ipykernel)

output in dataset and independent variable is all inputs in the dataset.

With this in mind, we need to split our dataset into the matrix of independent variables and the vector or dependent variable. Mathematically, Vector is defined as a matrix that has just one column.

Let's split our dataset into independent and dependent variables.

1. The independent variable in the dataset would be considered as 'x' and the 'homepage_featured', 'emailer_for_promotion', 'op_area', 'cuisine', 'city_code', 'region_code', 'category' columns would be considered as independent variable.
2. The dependent variable in the dataset would be considered as 'y' and the 'num_orders' column is considered as dependent variable.

```
In [122]: features = columns.drop(['num_orders'])
trainfinal3 = trainfinal[features]
X = trainfinal3.values
y = trainfinal['num_orders'].values
```

```
In [123]: trainfinal3.head()
```

```
Out[123]:
```

	homepage_featured	emailer_for_promotion	op_area	cuisine	city_code	region_code	category
0	0	0	2.0	3	647	56	0
1	0	0	2.0	3	647	56	0
2	0	0	2.0	3	647	56	0
3	0	0	2.0	3	647	56	0
4	0	0	2.0	3	647	56	0

Team Member 3

The screenshot shows a Jupyter Notebook interface with a browser window at the top. The notebook title is "Splitting The Dataset Into Dependent And Independent Variable". The text explains the importance of splitting a dataset into independent variables (X) and a dependent variable (y). It lists two points: 1. Independent variables include 'homepage_featured', 'emailer_for_promotion', 'op_area', 'cuisine', 'city_code', 'region_code', and 'category'. 2. The dependent variable is 'num_orders'. Below the text, there are two code cells. The first cell (In [122]) shows the code to split the dataset: `features = columns.drop(['num_orders'])`, `trainfinal3 = trainfinal[features]`, `X = trainfinal3.values`, and `y = trainfinal['num_orders'].values`. The second cell (In [123]) shows `trainfinal3.head()`. The output (Out[123]) is a table with 7 columns: homepage_featured, emailer_for_promotion, op_area, cuisine, city_code, region_code, and category. The first three rows of data are shown.

Splitting The Dataset Into Dependent And Independent Variable

In machine learning, the concept of dependent variable (y) and independent variables(x) is important to understand. Here, Dependent variable is nothing but output in dataset and independent variable is all inputs in the dataset.

With this in mind, we need to split our dataset into the matrix of independent variables and the vector or dependent variable. Mathematically, Vector is defined as a matrix that has just one column.

Let's split our dataset into independent and dependent variables.

1. The independent variable in the dataset would be considered as 'x' and the 'homepage_featured', 'emailer_for_promotion', 'op_area', 'cuisine', 'city_code', 'region_code', 'category' columns would be considered as independent variable.
2. The dependent variable in the dataset would be considered as 'y' and the 'num_orders' column is considered as dependent variable.

```
In [122]: features = columns.drop(['num_orders'])
trainfinal3 = trainfinal[features]
X = trainfinal3.values
y = trainfinal['num_orders'].values
```

```
In [123]: trainfinal3.head()
```

```
Out[123]:
```

	homepage_featured	emailer_for_promotion	op_area	cuisine	city_code	region_code	category
0	0	0	2.0	3	647	56	0
1	0	0	2.0	3	647	56	0
2	0	0	2.0	3	647	56	0

This screenshot is similar to the first one, but it includes an additional line of text: "output in dataset and independent variable is all inputs in the dataset." before the explanatory text. The code and output are identical to the first screenshot.

output in dataset and independent variable is all inputs in the dataset.

With this in mind, we need to split our dataset into the matrix of independent variables and the vector or dependent variable. Mathematically, Vector is defined as a matrix that has just one column.

Let's split our dataset into independent and dependent variables.

1. The independent variable in the dataset would be considered as 'x' and the 'homepage_featured', 'emailer_for_promotion', 'op_area', 'cuisine', 'city_code', 'region_code', 'category' columns would be considered as independent variable.
2. The dependent variable in the dataset would be considered as 'y' and the 'num_orders' column is considered as dependent variable.

```
In [122]: features = columns.drop(['num_orders'])
trainfinal3 = trainfinal[features]
X = trainfinal3.values
y = trainfinal['num_orders'].values
```

```
In [123]: trainfinal3.head()
```

```
Out[123]:
```

	homepage_featured	emailer_for_promotion	op_area	cuisine	city_code	region_code	category
0	0	0	2.0	3	647	56	0
1	0	0	2.0	3	647	56	0
2	0	0	2.0	3	647	56	0
3	0	0	2.0	3	647	56	0
4	0	0	2.0	3	647	56	0