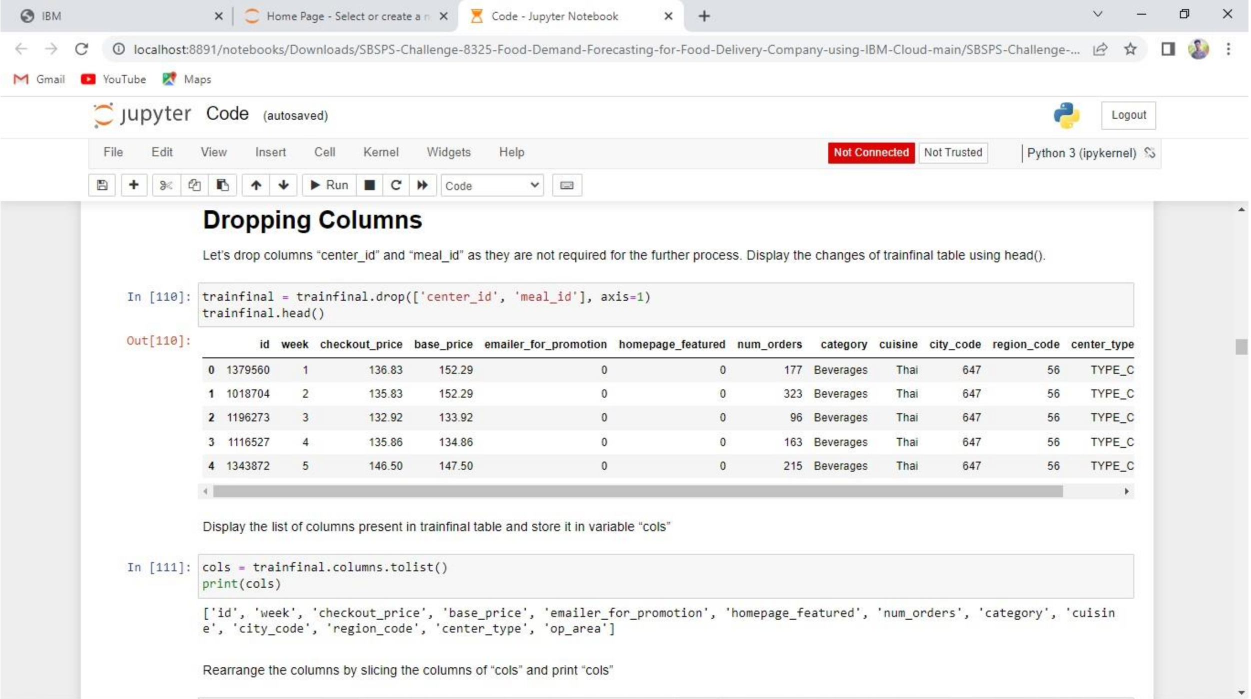
TEAM ID: PNT2022TMID44529

PROJECT NAME: DemandEst - AI powered Food DemandForecaster

Team Leader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Python 3 (ipykernel)
Run
Code

Dropping Columns

Let's drop columns "center_id" and "meal_id" as they are not required for the further process. Display the changes of trainfinal table using head().

```
In [110]: trainfinal = trainfinal.drop(['center_id', 'meal_id'], axis=1)
          trainfinal.head()
```

Out[110]:

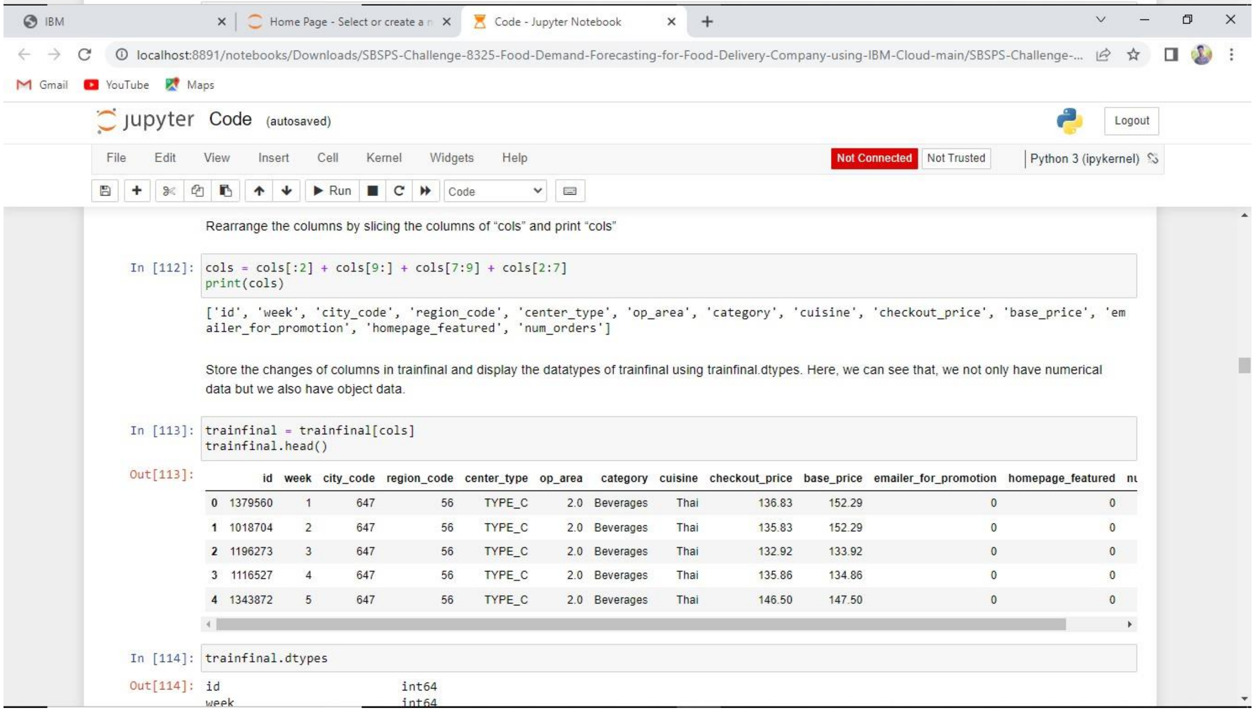
	id	week	checkout_price	base_price	emailer_for_promotion	homepage_featured	num_orders	category	cuisine	city_code	region_code	center_type
0	1379560	1	136.83	152.29	0	0	177	Beverages	Thai	647	56	TYPE_C
1	1018704	2	135.83	152.29	0	0	323	Beverages	Thai	647	56	TYPE_C
2	1196273	3	132.92	133.92	0	0	96	Beverages	Thai	647	56	TYPE_C
3	1116527	4	135.86	134.86	0	0	163	Beverages	Thai	647	56	TYPE_C
4	1343872	5	146.50	147.50	0	0	215	Beverages	Thai	647	56	TYPE_C

Display the list of columns present in trainfinal table and store it in variable "cols"

```
In [111]: cols = trainfinal.columns.tolist()
          print(cols)

          ['id', 'week', 'checkout_price', 'base_price', 'emailer_for_promotion', 'homepage_featured', 'num_orders', 'category', 'cuisin
          e', 'city_code', 'region_code', 'center_type', 'op_area']
```

Rearrange the columns by slicing the columns of "cols" and print "cols"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Rearrange the columns by slicing the columns of "cols" and print "cols"

```
In [112]: cols = cols[:2] + cols[9:] + cols[7:9] + cols[2:7]
          print(cols)

          ['id', 'week', 'city_code', 'region_code', 'center_type', 'op_area', 'category', 'cuisine', 'checkout_price', 'base_price', 'em
          ailer_for_promotion', 'homepage_featured', 'num_orders']
```

Store the changes of columns in trainfinal and display the datatypes of trainfinal using trainfinal.dtypes. Here, we can see that, we not only have numerical data but we also have object data.

```
In [113]: trainfinal = trainfinal[cols]
          trainfinal.head()
```

Out[113]:

	id	week	city_code	region_code	center_type	op_area	category	cuisine	checkout_price	base_price	emailer_for_promotion	homepage_featured	nu
0	1379560	1	647	56	TYPE_C	2.0	Beverages	Thai	136.83	152.29	0	0	
1	1018704	2	647	56	TYPE_C	2.0	Beverages	Thai	135.83	152.29	0	0	
2	1196273	3	647	56	TYPE_C	2.0	Beverages	Thai	132.92	133.92	0	0	
3	1116527	4	647	56	TYPE_C	2.0	Beverages	Thai	135.86	134.86	0	0	
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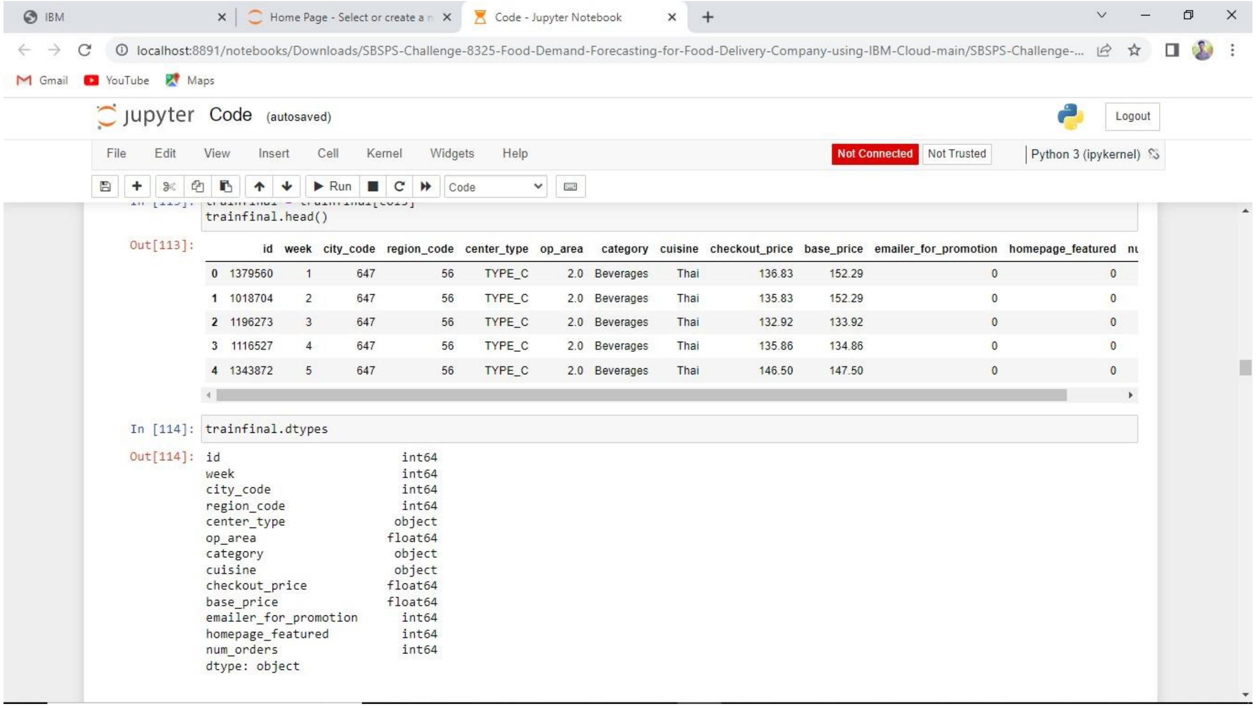
```
In [114]: trainfinal.dtypes

Out[114]: id                           int64
          week                         int64
```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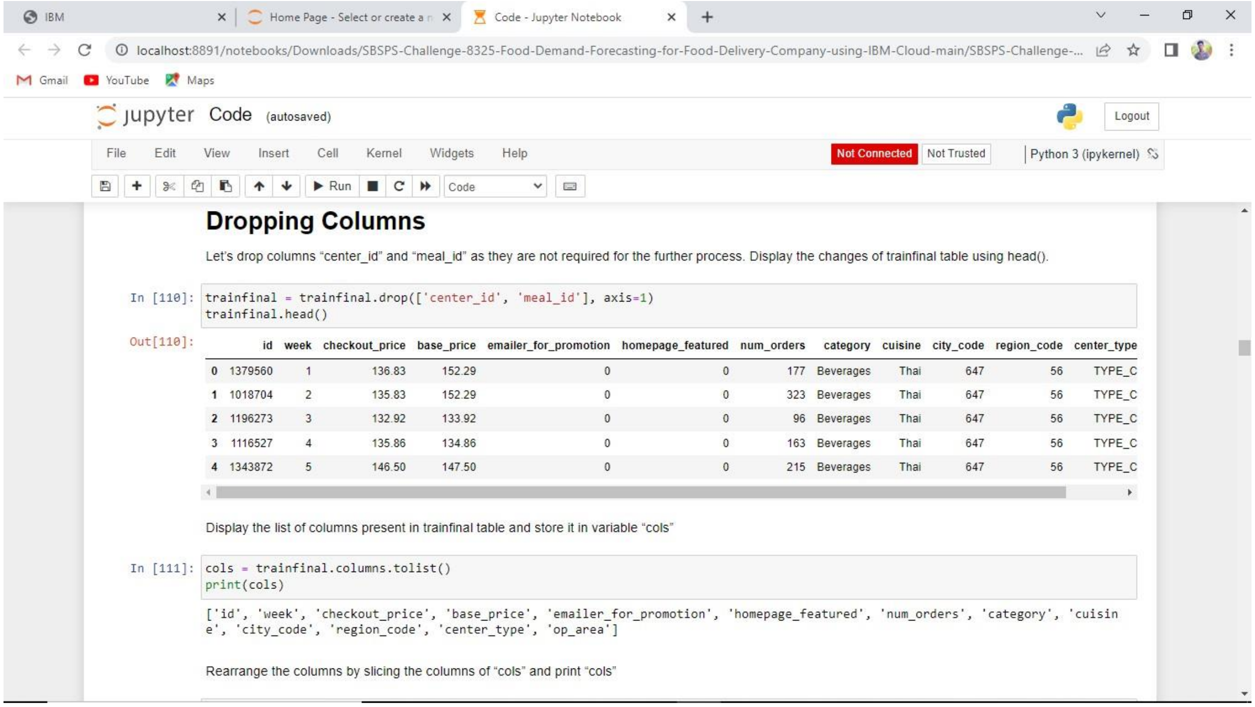
```
In [114]: trainfinal.dtypes
```

```
Out[114]: id                           int64
          week                         int64
          city_code                    int64
          region_code                  int64
          center_type                 object
          op_area                    float64
          category                    object
          cuisine                     object
          checkout_price             float64
          base_price                 float64
          emailer_for_promotion        int64
          homepage_featured            int64
          num_orders                   int64
          dtype: object
```

Team Member 1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```

Out[110]:

	id	week	checkout_price	base_price	emailer_for_promotion	homepage_featured	num_orders	category	cuisine	city_code	region_code	center_type
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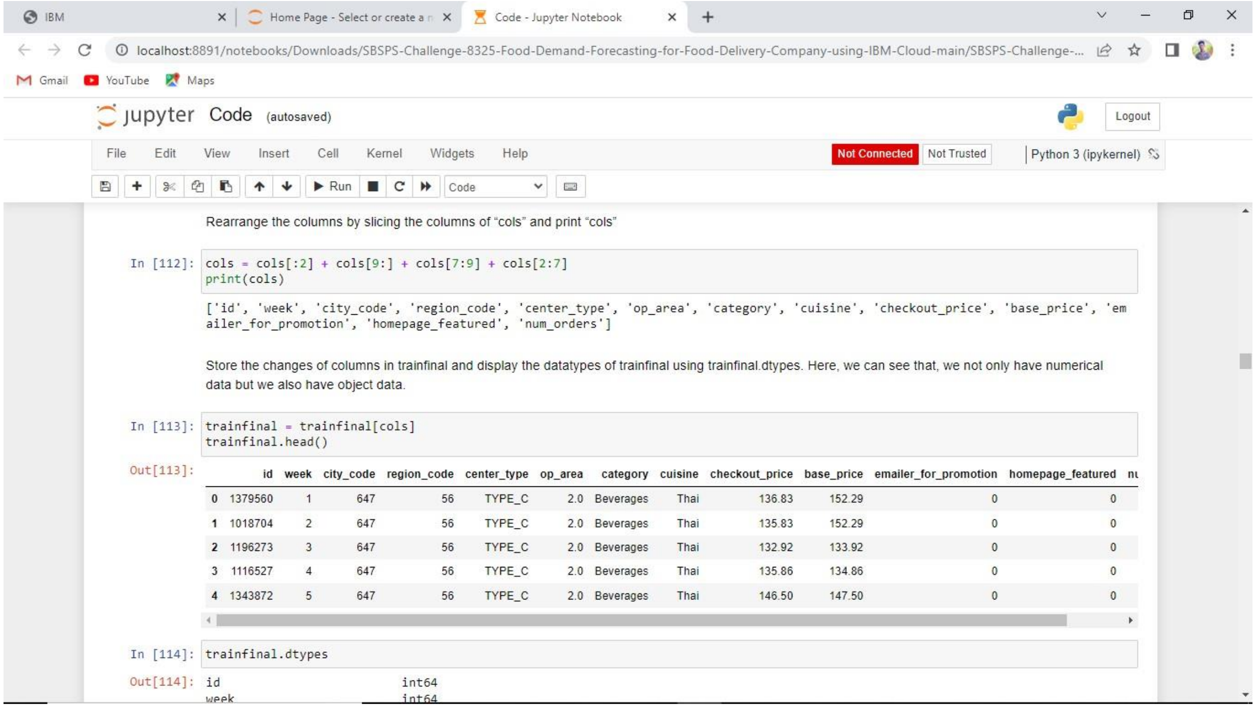
1	1018704	2	135.83	152.29	0	0	323	Beverages	Thai	647	56	TYPE_C
2	1196273	3	132.92	133.92	0	0	96	Beverages	Thai	647	56	TYPE_C
3	1116527	4	135.86	134.86	0	0	163	Beverages	Thai	647	56	TYPE_C
4	1343872	5	146.50	147.50	0	0	215	Beverages	Thai	647	56	TYPE_C

Display the list of columns present in trainfinal table and store it in variable “cols”

```
In [111]: cols = trainfinal.columns.tolist()
          print(cols)

          ['id', 'week', 'checkout_price', 'base_price', 'emailer_for_promotion', 'homepage_featured', 'num_orders', 'category', 'cuisin
          e', 'city_code', 'region_code', 'center_type', 'op_area']
```

Rearrange the columns by slicing the columns of “cols” and print “cols”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Not Connected
Not Trusted
Python 3 (ipykernel)
Run
Code

Rearrange the columns by slicing the columns of “cols” and print “cols”

In [112]:
```
cols = cols[:2] + cols[9:] + cols[7:9] + cols[2:7]
print(cols)
```

```
['id', 'week', 'city_code', 'region_code', 'center_type', 'op_area', 'category', 'cuisine', 'checkout_price', 'base_price', 'em
ailer_for_promotion', 'homepage_featured', 'num_orders']
```

Store the changes of columns in trainfinal and display the datatypes of trainfinal using trainfinal.dtypes. Here, we can see that, we not only have numerical data but we also have object data.

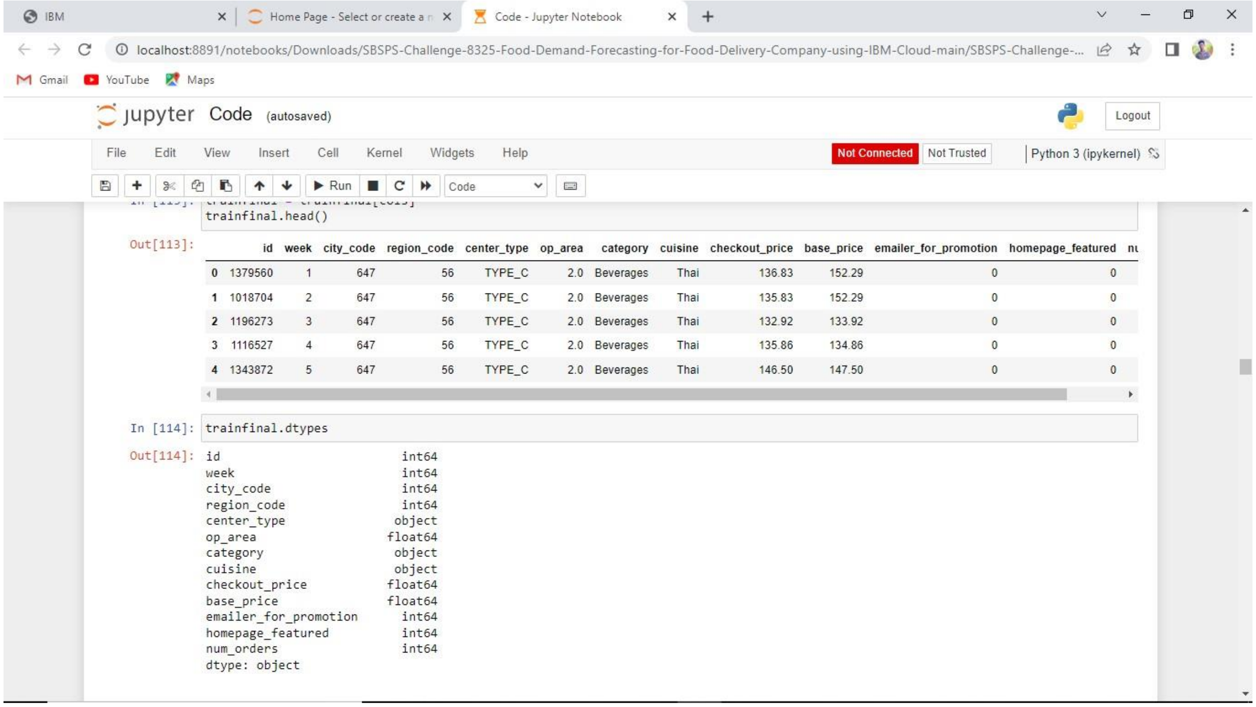
In [113]:
```
trainfinal = trainfinal[cols]
trainfinal.head()
```

Out[113]:

	id	week	city_code	region_code	center_type	op_area	category	cuisine	checkout_price	base_price	emailer_for_promotion	homepage_featured	nu
0	1379560	1	647	56	TYPE_C	2.0	Beverages	Thai	136.83	152.29	0	0	
1	1018704	2	647	56	TYPE_C	2.0	Beverages	Thai	135.83	152.29	0	0	
2	1196273	3	647	56	TYPE_C	2.0	Beverages	Thai	132.92	133.92	0	0	
3	1116527	4	647	56	TYPE_C	2.0	Beverages	Thai	135.86	134.86	0	0	
4	1343872	5	647	56	TYPE_C	2.0	Beverages	Thai	146.50	147.50	0	0	

In [114]:
```
trainfinal.dtypes
```

Out[114]:
```
id                         int64
week                       int64
```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Python 3 (ipykernel)
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```
trainfinal.head()
```

Out[113]:

	id	week	city_code	region_code	center_type	op_area	category	cuisine	checkout_price	base_price	emailer_for_promotion	homepage_featured	nu
0	1379560	1	647	56	TYPE_C	2.0	Beverages	Thai	136.83	152.29	0	0	
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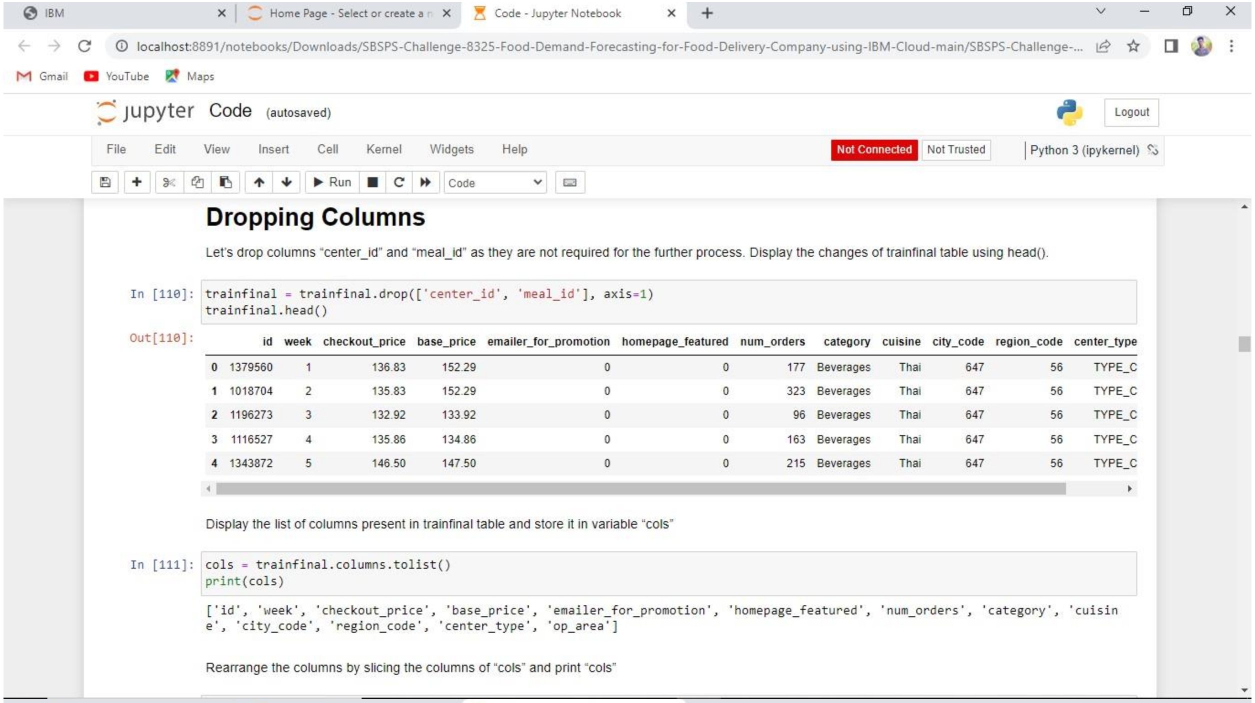
In [114]:
```
trainfinal.dtypes
```

Out[114]:
```
id                         int64
week                       int64
city_code                  int64
region_code                int64
center_type               object
op_area                  float64
category                  object
cuisine                   object
checkout_price           float64
base_price               float64
emailer_for_promotion      int64
homepage_featured          int64
num_orders                 int64
dtype: object
```

Team Member 2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Dropping Columns

Let's drop columns "center_id" and "meal_id" as they are not required for the further process. Display the changes of trainfinal table using head().

```
In [110]: trainfinal = trainfinal.drop(['center_id', 'meal_id'], axis=1)
          trainfinal.head()
```

Out[110]:

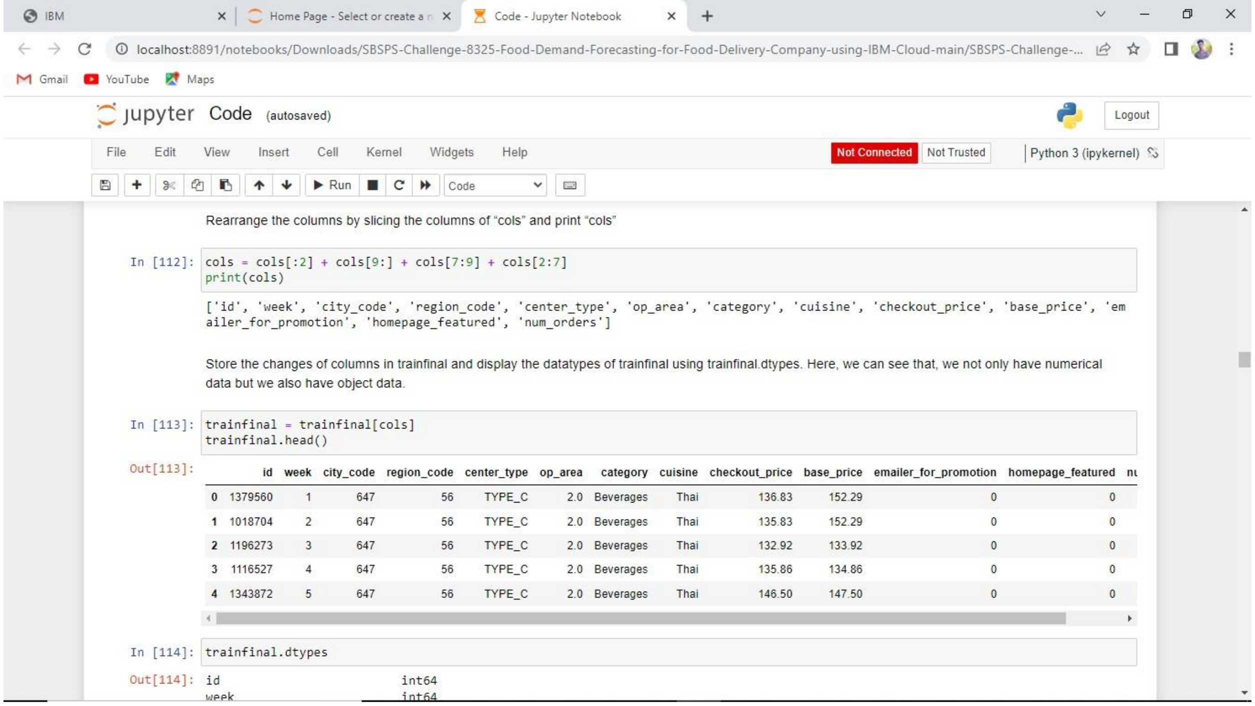
	id	week	checkout_price	base_price	emailer_for_promotion	homepage_featured	num_orders	category	cuisine	city_code	region_code	center_type
0	1379560	1	136.83	152.29	0	0	177	Beverages	Thai	647	56	TYPE_C
1	1018704	2	135.83	152.29	0	0	323	Beverages	Thai	647	56	TYPE_C
2	1196273	3	132.92	133.92	0	0	96	Beverages	Thai	647	56	TYPE_C
3	1116527	4	135.86	134.86	0	0	163	Beverages	Thai	647	56	TYPE_C
4	1343872	5	146.50	147.50	0	0	215	Beverages	Thai	647	56	TYPE_C

Display the list of columns present in trainfinal table and store it in variable "cols"

```
In [111]: cols = trainfinal.columns.tolist()
          print(cols)

          ['id', 'week', 'checkout_price', 'base_price', 'emailer_for_promotion', 'homepage_featured', 'num_orders', 'category', 'cuisin
          e', 'city_code', 'region_code', 'center_type', 'op_area']
```

Rearrange the columns by slicing the columns of "cols" and print "cols"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Rearrange the columns by slicing the columns of "cols" and print "cols"

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In [112]: cols = cols[:2] + cols[9:] + cols[7:9] + cols[2:7]
          print(cols)

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```

Store the changes of columns in trainfinal and display the datatypes of trainfinal using trainfinal.dtypes. Here, we can see that, we not only have numerical data but we also have object data.

```
In [113]: trainfinal = trainfinal[cols]
          trainfinal.head()
```

Out[113]:

	id	week	city_code	region_code	center_type	op_area	category	cuisine	checkout_price	base_price	emailer_for_promotion	homepage_featured	nu
0	1379560	1	647	56	TYPE_C	2.0	Beverages	Thai	136.83	152.29	0	0	
1	1018704	2	647	56	TYPE_C	2.0	Beverages	Thai	135.83	152.29	0	0	
2	1196273	3	647	56	TYPE_C	2.0	Beverages	Thai	132.92	133.92	0	0	
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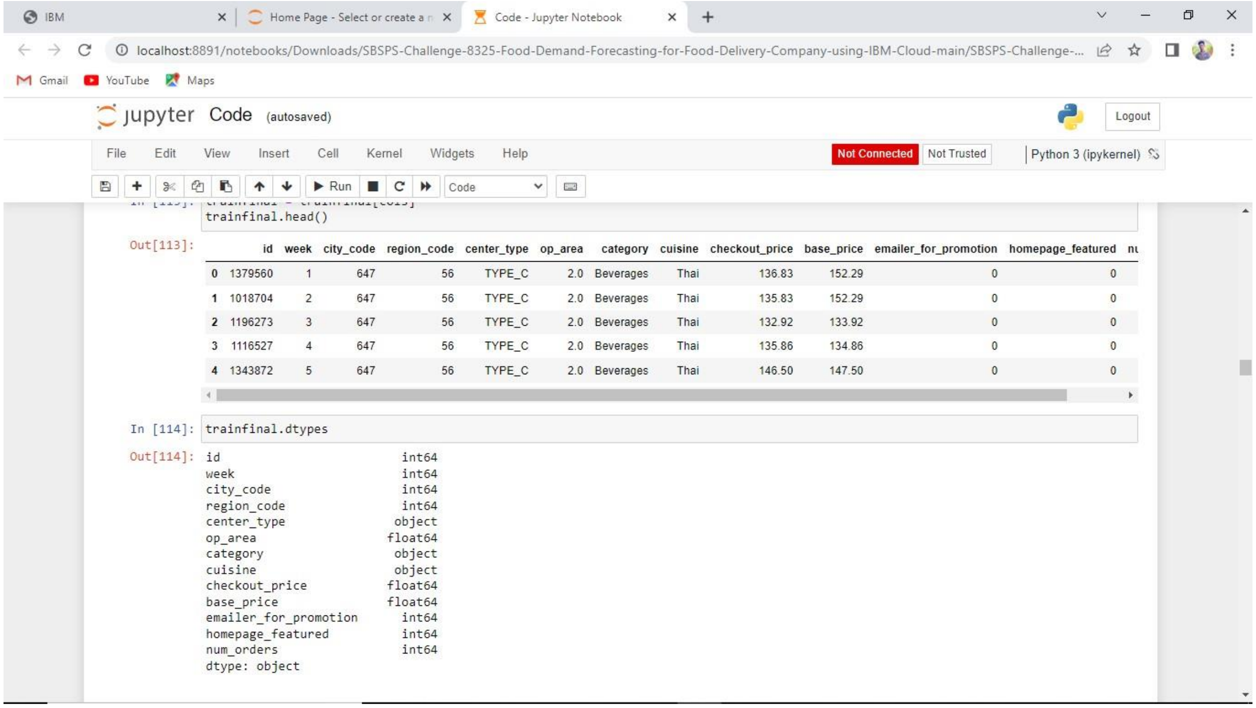
```
In [114]: trainfinal.dtypes

Out[114]: id                          int64
          week                        int64
```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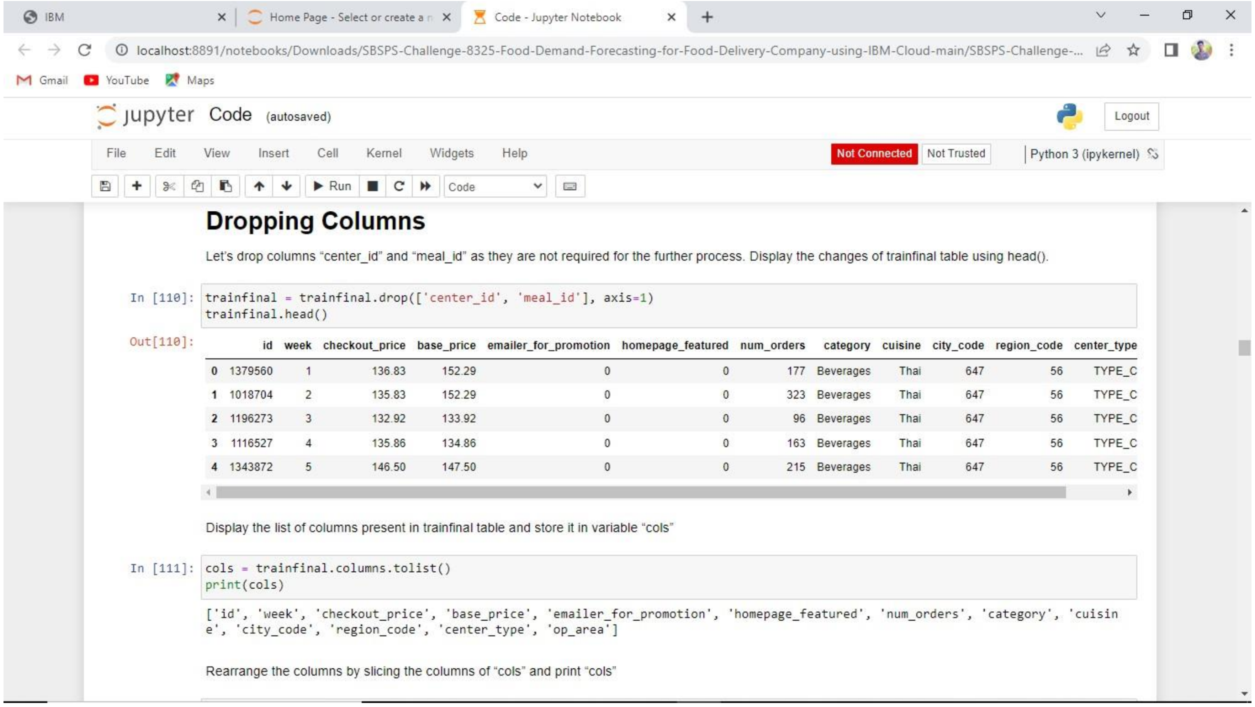
```
In [114]: trainfinal.dtypes
```

```
Out[114]: id                          int64
          week                        int64
          city_code                   int64
          region_code                 int64
          center_type                object
          op_area                   float64
          category                   object
          cuisine                    object
          checkout_price            float64
          base_price                float64
          emailer_for_promotion       int64
          homepage_featured           int64
          num_orders                  int64
          dtype: object
```

Team Member 3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          e', 'city_code', 'region_code', 'center_type', 'op_area']
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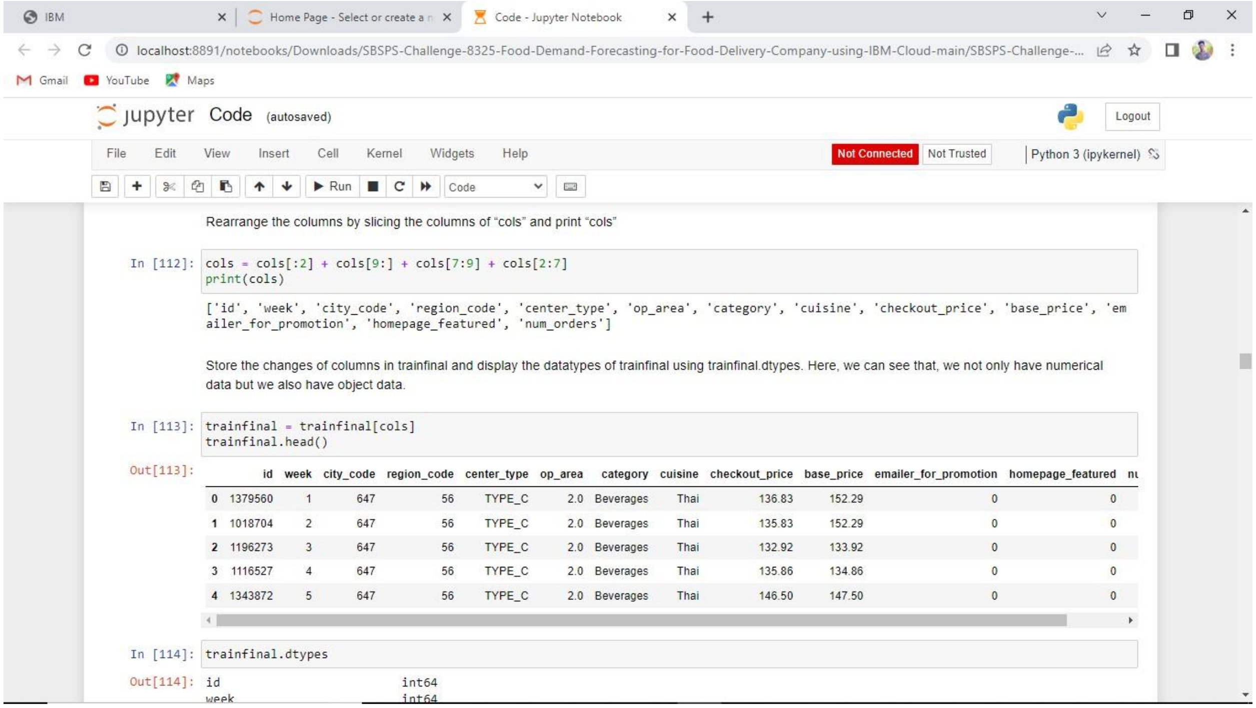
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Code

Rearrange the columns by slicing the columns of “cols” and print “cols”

```
In [112]: cols = cols[:2] + cols[9:] + cols[7:9] + cols[2:7]
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```

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```
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```

Out[113]:

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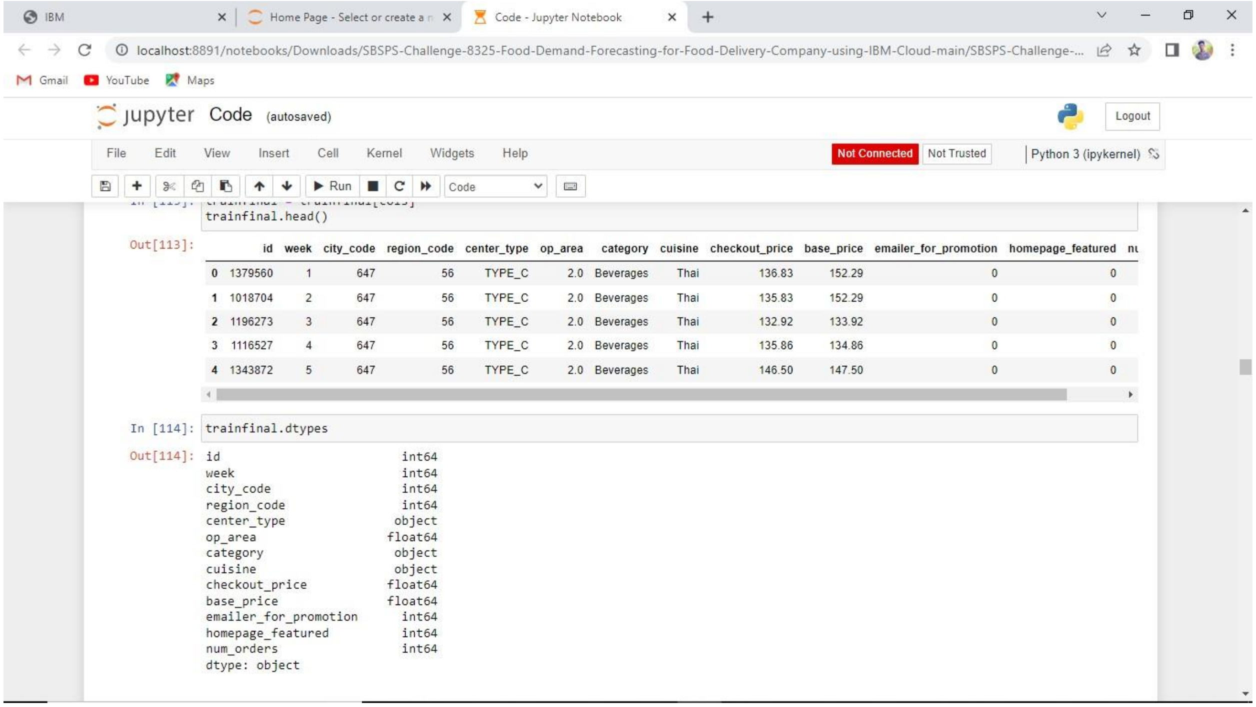
1	1018704	2	647	56	TYPE_C	2.0	Beverages	Thai	135.83	152.29	0	0	
2	1196273	3	647	56	TYPE_C	2.0	Beverages	Thai	132.92	133.92	0	0	
3	1116527	4	647	56	TYPE_C	2.0	Beverages	Thai	135.86	134.86	0	0	
4	1343872	5	647	56	TYPE_C	2.0	Beverages	Thai	146.50	147.50	0	0	

```
In [114]: trainfinal.dtypes

Out[114]: id                           int64
          week                         int64
```


IBM
Home Page - Select or create a n
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)
Run
Code

```
          trainfinal.head()
```

Out[113]:

	id	week	city_code	region_code	center_type	op_area	category	cuisine	checkout_price	base_price	emailer_for_promotion	homepage_featured	nu
0	1379560	1	647	56	TYPE_C	2.0	Beverages	Thai	136.83	152.29	0	0	
1	1018704	2	647	56	TYPE_C	2.0	Beverages	Thai	135.83	152.29	0	0	
2	1196273	3	647	56	TYPE_C	2.0	Beverages	Thai	132.92	133.92	0	0	
3	1116527	4	647	56	TYPE_C	2.0	Beverages	Thai	135.86	134.86	0	0	
4	1343872	5	647	56	TYPE_C	2.0	Beverages	Thai	146.50	147.50	0	0	

```
In [114]: trainfinal.dtypes

Out[114]: id                           int64
          week                         int64
          city_code                    int64
          region_code                  int64
          center_type                 object
          op_area                    float64
          category                    object
          cuisine                     object
          checkout_price             float64
          base_price                 float64
          emailer_for_promotion        int64
          homepage_featured            int64
          num_orders                   int64
          dtype: object
```