

TEAM ID: PNT2022TMID52731

## PROJECT NAME: DemandEst - AI powered Food Demand Forecaster

Team Leader

The screenshot displays a Jupyter Notebook interface with the title "Reading And Merging .Csv Files". The notebook is running on a Python 3 (ipykernel) environment. The code in the notebook reads two CSV files from an S3 bucket and merges them into a single dataset.

**Code Snippets:**

```
In [104]: body = client_ebb884ca98d444a5ae59a6874ea685aa.get_object(Bucket='fooddemandforecatsing-donotdelete-pr-cdss9tfwyg4lgb',Key='meal_
# add missing __iter__ method, so pandas accepts body as file-like object
if not hasattr(body, "__iter__"): body.__iter__ = types.MethodType( __iter__, body )

meal_info = pd.read_csv(body)

In [105]: meal_info.head()

Out[105]:
```

	meal_id	category	cuisine
0	1885	Beverages	Thai
1	1993	Beverages	Thai
2	2539	Beverages	Thai
3	1248	Beverages	Indian
4	2631	Beverages	Indian

```
In [106]: body = client_ebb884ca98d444a5ae59a6874ea685aa.get_object(Bucket='fooddemandforecatsing-donotdelete-pr-cdss9tfwyg4lgb',Key='fulf:
# add missing __iter__ method, so pandas accepts body as file-like object
if not hasattr(body, "__iter__"): body.__iter__ = types.MethodType( __iter__, body )

fulfilment_center_info = pd.read_csv(body)

fulfilment_center_info.head()

Out[107]:
```

	center_id	city_code	region_code	center_type	op_area
0	11	679	56	TYPE_A	3.7
1	13	590	56	TYPE_B	6.7
2	124	590	56	TYPE_C	4.0
3	66	648	34	TYPE_A	4.1
4	94	632	34	TYPE_C	3.6

Merging train.csv and meal\_info.csv dataset by using common key id:

We notice that meal\_id column in train.csv is similar to meal\_id in meal\_info.csv dataset. Let us merge these two datasets, train.csv and meal\_info.csv using common key meal\_id and name the table as trainfinal.

```
In [108]: trainfinal = pd.merge(train, meal_info, on="meal_id", how="outer")

Merging trainfinal.csv and fulfilment_center_info.csv dataset by using common key id:

We notice that center_id column in trainfinal.csv is similar to center_id in fulfilment_center_info.csv dataset. Let us merge these two datasets, trainfinal.csv and fulfilment_center_info.csv using common key center_id and store it back in trainfinal. Display the first five rows of trainfinal using head().



```
In [109]: trainfinal = pd.merge(trainfinal,fulfilment_center_info, on="center_id", how="outer")
```


```

jupyter Code (autosaved)

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Not Connected Not Trusted Python 3 (ipykernel)

Run

3 55 648 34 TYPE\_A 4.1

4 94 632 34 TYPE\_C 3.6

Merging train.csv and meal\_info.csv dataset by using common key id:

We notice that meal\_id column in train.csv is similar to meal\_id in meal\_info.csv dataset. Let us merge these two datasets, train.csv and meal\_info.csv using common key meal\_id and name the table as trainfinal.

In [108]: `trainfinal = pd.merge(train, meal_info, on="meal_id", how="outer")`

Merging trainfinal.csv and fulfilment\_center\_info.csv dataset by using common key id:

We notice that center\_id column in trainfinal.csv is similar to center\_id in fulfilment\_center\_info.csv dataset. Let us merge these two datasets, trainfinal.csv and fulfilment\_center\_info.csv using common key center\_id and store it back in trainfinal. Display the first five rows of trainfinal using head().

In [109]: `trainfinal = pd.merge(trainfinal, fulfilment_center_info, on="center_id", how="outer")`  
`trainfinal.head()`

Out[109]:

	id	week	center_id	meal_id	checkout_price	base_price	emalier_for_promotion	homepage_featured	num_orders	category	cuisine	city_code	regio
0	1379560	1	55	1885	136.83	152.29	0	0	177	Beverages	Thai	647	
1	1018704	2	55	1885	135.83	152.29	0	0	323	Beverages	Thai	647	
2	1196273	3	55	1885	132.92	133.92	0	0	96	Beverages	Thai	647	
3	1116527	4	55	1885	135.86	134.86	0	0	163	Beverages	Thai	647	
4	1343872	5	55	1885	146.50	147.50	0	0	215	Beverages	Thai	647	

## Team Member 1

jupyter Code (autosaved)

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Not Connected Not Trusted Python 3 (ipykernel)

Run

### Reading And Merging .Csv Files

In [104]:

```
body = client_ebb884ca98d444a5ae59a6874ea685aa.get_object(Bucket='fooddemandforecatsing-donotdelete-pr-cdss9tfwyg4lgb',Key='meal_info.csv')
# add missing __iter__ method, so pandas accepts body as file-like object
if not hasattr(body, "__iter__"): body.__iter__ = types.MethodType(__iter__, body)

meal_info = pd.read_csv(body)
```

In [105]: `meal_info.head()`

Out[105]:

	meal_id	category	cuisine
0	1885	Beverages	Thai
1	1993	Beverages	Thai
2	2539	Beverages	Thai
3	1248	Beverages	Indian
4	2631	Beverages	Indian

In [106]:

```
body = client_ebb884ca98d444a5ae59a6874ea685aa.get_object(Bucket='fooddemandforecatsing-donotdelete-pr-cdss9tfwyg4lgb',Key='fulfilment_center_info.csv')
# add missing __iter__ method, so pandas accepts body as file-like object
if not hasattr(body, "__iter__"): body.__iter__ = types.MethodType(__iter__, body)

fulfilment_center_info = pd.read_csv(body)
```

jupyter Code (autosaved)

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Not Connected Not Trusted Python 3 (ipykernel)

```
fulfilment_center_info = pd.read_csv(body)
```

In [107]:

```
fulfilment_center_info.head()
```

Out[107]:

	center_id	city_code	region_code	center_type	op_area
0	11	679	56	TYPE_A	3.7
1	13	590	56	TYPE_B	6.7
2	124	590	56	TYPE_C	4.0
3	66	648	34	TYPE_A	4.1
4	94	632	34	TYPE_C	3.6

Merging train.csv and meal\_info.csv dataset by using common key id:

We notice that meal\_id column in train.csv is similar to meal\_id in meal\_info.csv dataset. Let us merge these two datasets, train.csv and meal\_info.csv using common key meal\_id and name the table as trainfinal.

In [108]:

```
trainfinal = pd.merge(train, meal_info, on="meal_id", how="outer")
```

Merging trainfinal.csv and fulfilment\_center\_info.csv dataset by using common key id:

We notice that center\_id column in trainfinal.csv is similar to center\_id in fulfilment\_center\_info.csv dataset. Let us merge these two datasets, trainfinal.csv and fulfilment\_center\_info.csv using common key center\_id and store it back in trainfinal. Display the first five rows of trainfinal using head().

In [109]:

```
trainfinal = pd.merge(trainfinal, fulfilment_center_info, on="center_id", how="outer")
```

jupyter Code (autosaved)

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Not Connected Not Trusted Python 3 (ipykernel)

```
3 66 648 34 TYPE_A 4.1
4 94 632 34 TYPE_C 3.6
```

Merging train.csv and meal\_info.csv dataset by using common key id:

We notice that meal\_id column in train.csv is similar to meal\_id in meal\_info.csv dataset. Let us merge these two datasets, train.csv and meal\_info.csv using common key meal\_id and name the table as trainfinal.

In [108]:

```
trainfinal = pd.merge(train, meal_info, on="meal_id", how="outer")
```

Merging trainfinal.csv and fulfilment\_center\_info.csv dataset by using common key id:

We notice that center\_id column in trainfinal.csv is similar to center\_id in fulfilment\_center\_info.csv dataset. Let us merge these two datasets, trainfinal.csv and fulfilment\_center\_info.csv using common key center\_id and store it back in trainfinal. Display the first five rows of trainfinal using head().

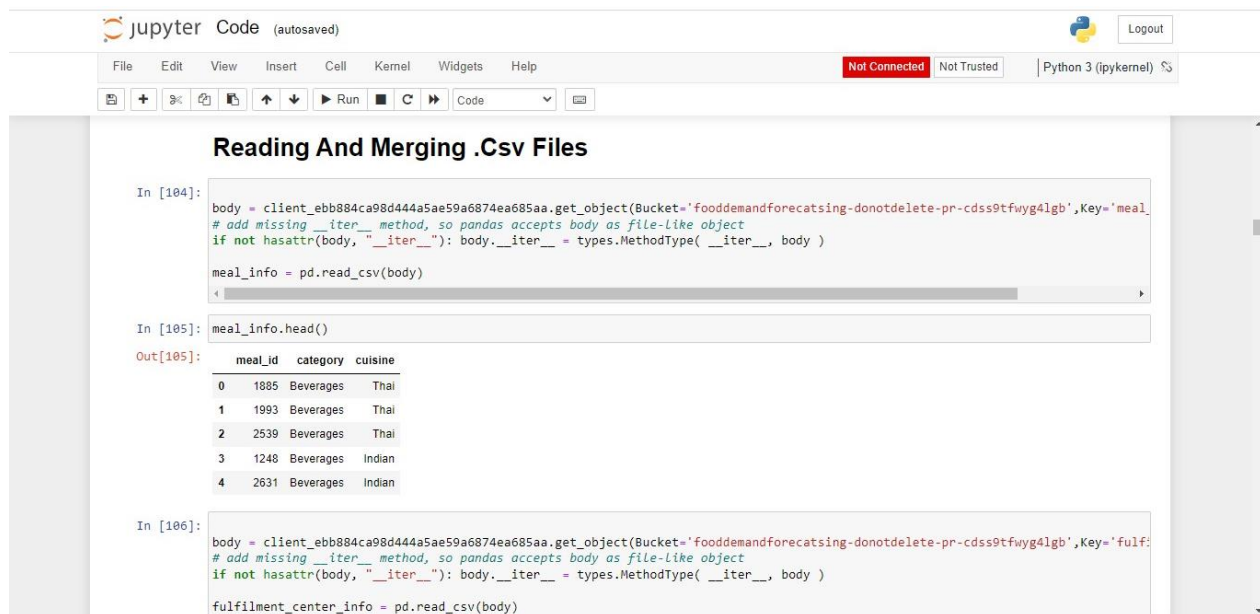
In [109]:

```
trainfinal = pd.merge(trainfinal, fulfilment_center_info, on="center_id", how="outer")
trainfinal.head()
```

Out[109]:

	id	week	center_id	meal_id	checkout_price	base_price	emailer_for_promotion	homepage_featured	num_orders	category	cuisine	city_code	region_code
0	1379560	1	55	1885	136.83	152.29	0	0	177	Beverages	Thai	647	
1	1018704	2	55	1885	135.83	152.29	0	0	323	Beverages	Thai	647	
2	1196273	3	55	1885	132.92	133.92	0	0	96	Beverages	Thai	647	
3	1116527	4	55	1885	135.86	134.86	0	0	163	Beverages	Thai	647	
4	1343872	5	55	1885	146.50	147.50	0	0	215	Beverages	Thai	647	

## Team Member 2



The Jupyter Notebook interface displays the following code and output:

```
In [104]: body = client_ebb884ca98d444a5ae59a6874ea685aa.get_object(Bucket='fooddemandforecatsing-donotdelete-pr-cdss9tfwyg41gb',Key='meal_
# add missing __iter__ method, so pandas accepts body as file-like object
if not hasattr(body, "__iter__"): body.__iter__ = types.MethodType( __iter__, body )

meal_info = pd.read_csv(body)
```

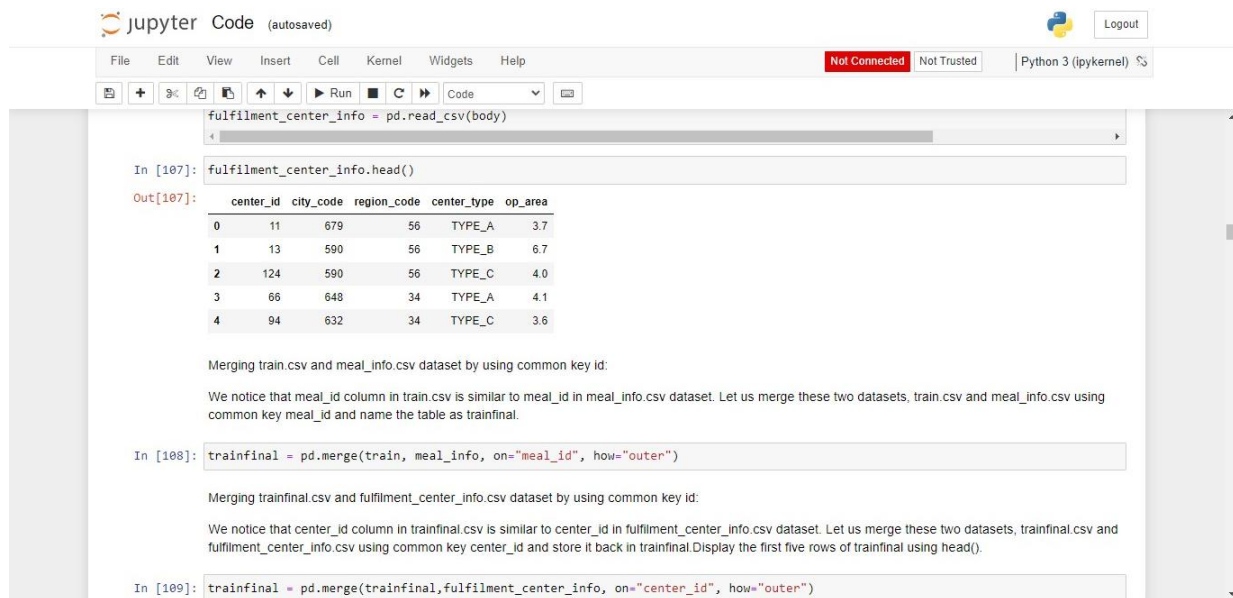
```
In [105]: meal_info.head()
```

```
Out[105]:
```

	meal_id	category	cuisine
0	1885	Beverages	Thai
1	1993	Beverages	Thai
2	2539	Beverages	Thai
3	1248	Beverages	Indian
4	2631	Beverages	Indian

```
In [106]: body = client_ebb884ca98d444a5ae59a6874ea685aa.get_object(Bucket='fooddemandforecatsing-donotdelete-pr-cdss9tfwyg41gb',Key='fulf:
# add missing __iter__ method, so pandas accepts body as file-like object
if not hasattr(body, "__iter__"): body.__iter__ = types.MethodType( __iter__, body )

fulfilment_center_info = pd.read_csv(body)
```



The Jupyter Notebook interface displays the following code and output:

```
fulfilment_center_info = pd.read_csv(body)
```

```
In [107]: fulfilment_center_info.head()
```

```
Out[107]:
```

	center_id	city_code	region_code	center_type	op_area
0	11	679	56	TYPE_A	3.7
1	13	590	56	TYPE_B	6.7
2	124	590	56	TYPE_C	4.0
3	66	648	34	TYPE_A	4.1
4	94	632	34	TYPE_C	3.6

Merging train.csv and meal\_info.csv dataset by using common key id:

We notice that meal\_id column in train.csv is similar to meal\_id in meal\_info.csv dataset. Let us merge these two datasets, train.csv and meal\_info.csv using common key meal\_id and name the table as trainfinal.

```
In [108]: trainfinal = pd.merge(train, meal_info, on="meal_id", how="outer")
```

Merging trainfinal.csv and fulfilment\_center\_info.csv dataset by using common key id:

We notice that center\_id column in trainfinal.csv is similar to center\_id in fulfilment\_center\_info.csv dataset. Let us merge these two datasets, trainfinal.csv and fulfilment\_center\_info.csv using common key center\_id and store it back in trainfinal. Display the first five rows of trainfinal using head().

```
In [109]: trainfinal = pd.merge(trainfinal,fulfilment_center_info, on="center_id", how="outer")
```

jupyter Code (autosaved) Logout

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

Run Code

	3	86	648	34	TYPE_A	4.1
	4	94	632	34	TYPE_C	3.6

Merging train.csv and meal\_info.csv dataset by using common key id:

We notice that meal\_id column in train.csv is similar to meal\_id in meal\_info.csv dataset. Let us merge these two datasets, train.csv and meal\_info.csv using common key meal\_id and name the table as trainfinal.

```
In [108]: trainfinal = pd.merge(train, meal_info, on="meal_id", how="outer")
```

Merging trainfinal.csv and fulfilment\_center\_info.csv dataset by using common key id:

We notice that center\_id column in trainfinal.csv is similar to center\_id in fulfilment\_center\_info.csv dataset. Let us merge these two datasets, trainfinal.csv and fulfilment\_center\_info.csv using common key center\_id and store it back in trainfinal. Display the first five rows of trainfinal using head().

```
In [109]: trainfinal = pd.merge(trainfinal, fulfilment_center_info, on="center_id", how="outer")
trainfinal.head()
```

```
Out[109]:
```

	id	week	center_id	meal_id	checkout_price	base_price	emailer_for_promotion	homepage_featured	num_orders	category	cuisine	city_code	regio
0	1379560	1	55	1885	136.83	152.29	0	0	177	Beverages	Thai	647	
1	1018704	2	55	1885	135.83	152.29	0	0	323	Beverages	Thai	647	
2	1196273	3	55	1885	132.92	133.92	0	0	96	Beverages	Thai	647	
3	1116527	4	55	1885	135.86	134.86	0	0	163	Beverages	Thai	647	
4	1343872	5	55	1885	146.50	147.50	0	0	215	Beverages	Thai	647	

## Team Member 3

jupyter Code (autosaved) Logout

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Run Code

### Reading And Merging .Csv Files

```
In [104]: body = client_ebb884ca98d444a5ae59a6874ea685aa.get_object(Bucket='fooddemandforecating-donotdelete-pr-cdss9tfwyg4lgb',Key='meal_
# add missing __iter__ method, so pandas accepts body as file-like object
if not hasattr(body, "__iter__"): body.__iter__ = types.MethodType(__iter__, body )

meal_info = pd.read_csv(body)
```

```
In [105]: meal_info.head()
```

```
Out[105]:
```

	meal_id	category	cuisine
0	1885	Beverages	Thai
1	1993	Beverages	Thai
2	2539	Beverages	Thai
3	1248	Beverages	Indian
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```
In [106]: body = client_ebb884ca98d444a5ae59a6874ea685aa.get_object(Bucket='fooddemandforecating-donotdelete-pr-cdss9tfwyg4lgb',Key='fulf
# add missing __iter__ method, so pandas accepts body as file-like object
if not hasattr(body, "__iter__"): body.__iter__ = types.MethodType(__iter__, body )

fulfilment_center_info = pd.read_csv(body)
```

Jupyter Code (autosaved)

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Not Connected Not Trusted Python 3 (ipykernel)

```
fulfilment_center_info = pd.read_csv(body)
```

In [107]: `fulfilment_center_info.head()`

Out[107]:

	center_id	city_code	region_code	center_type	op_area
0	11	679	56	TYPE_A	3.7
1	13	590	56	TYPE_B	6.7
2	124	590	56	TYPE_C	4.0
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Merging train.csv and meal\_info.csv dataset by using common key id:

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Jupyter Code (autosaved)

File Edit View Insert Cell Kernel Widgets Help

Not Connected Not Trusted Python 3 (ipykernel)

```
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```

Merging train.csv and meal\_info.csv dataset by using common key id:

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In [109]: `trainfinal = pd.merge(trainfinal, fulfilment_center_info, on="center_id", how="outer")`  
`trainfinal.head()`

Out[109]:

	id	week	center_id	meal_id	checkout_price	base_price	emailer_for_promotion	homepage_featured	num_orders	category	cuisine	city_code	region_code
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2	1196273	3	55	1885	132.92	133.92	0	0	96	Beverages	Thai	647	
3	1116527	4	55	1885	135.86	134.86	0	0	163	Beverages	Thai	647	
4	1343872	5	55	1885	146.50	147.50	0	0	215	Beverages	Thai	647	