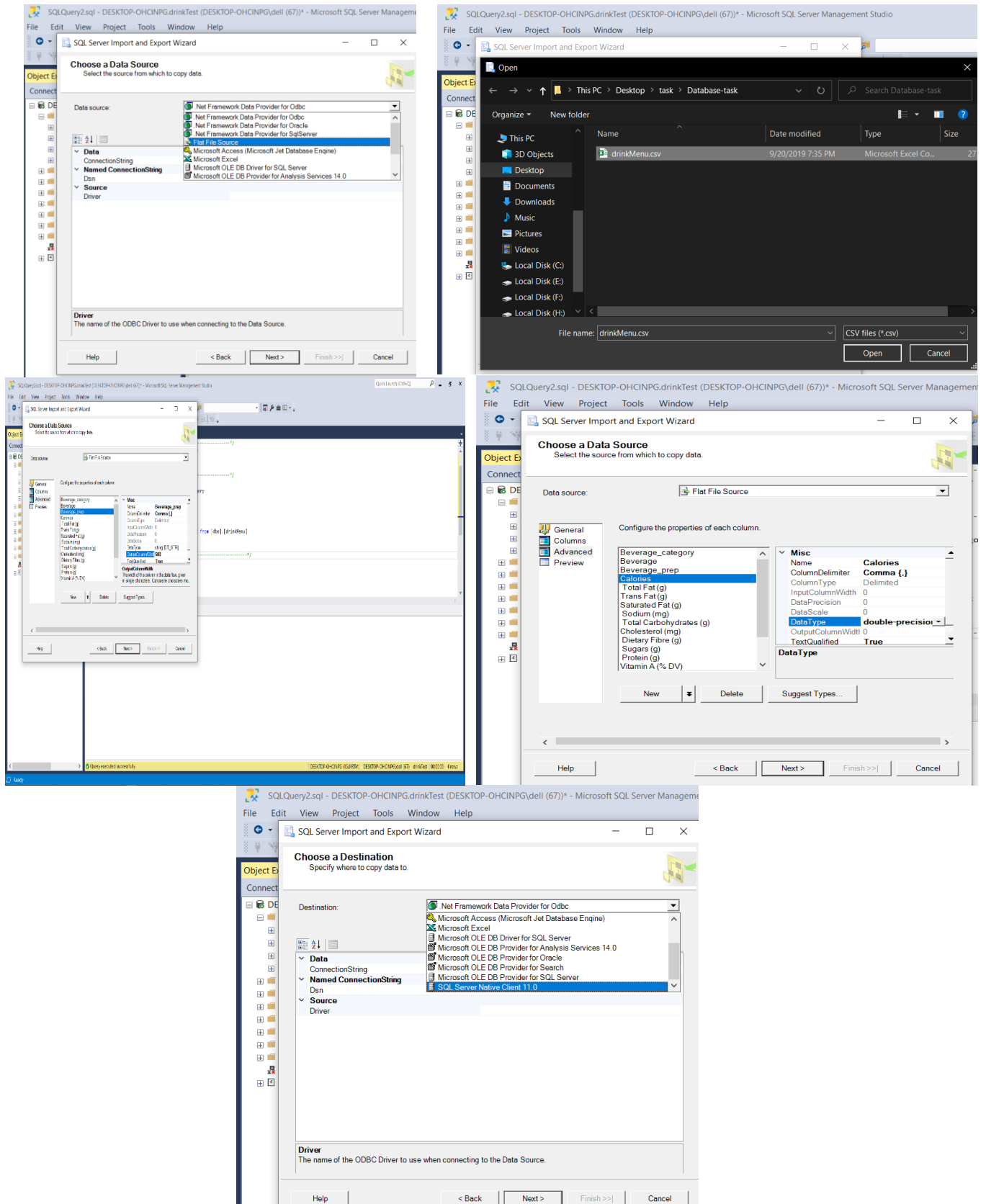


Database Task

steps to import excel sheet to SSMS:

- 1- Create database
- 2- Import data



3- Apply SQL Queries

The image displays three screenshots of Microsoft SQL Server Management Studio (SSMS) showing SQL queries and their results.

Top Left Screenshot: The query window shows a query to select the beverage with the highest calories.

```
select Beverage
from [dbo].[drinkMenu]
where Calories = (select MAX(Calories) from [dbo].[drinkMenu])
```

The Results pane shows one row:

Beverage
White Chocolate Mocha (Without Whipped Cream)

Top Right Screenshot: The query window shows a query to select the average calories for each beverage category.

```
select Beverage
from [dbo].[drinkMenu]
where Calories = (select MAX(Calories) from [dbo].[drinkMenu])
/*-----*/
select AVG(Calories) as AVG , Beverage_category
from [dbo].[drinkMenu]
Group by [Beverage_category]
/*-----*/
select Beverage from drinkMenu
where Beverage_category= (select Beverage_category
from drinkMenu
group by Beverage_category
having avg(Calories)=(
select min(avg_x)
from (select AVG(Calories) as avg_x from [dbo].[drinkMenu]
Group by [Beverage_category]) r
));
```

The Results pane shows a table with 9 rows:

AVG	Beverage_category
140.172413793103	Classic Espresso Drinks
4.25	Coffee
276.944444444444	Frappuccino® Blended Coffee
233.076923076923	Frappuccino® Blended Crème
162.5	Frappuccino® Light Blended Coffee
114.444444444444	Shaken Iced Beverages
250	Signature Espresso Drinks
262.222222222222	Smoothies
177.307692307692	Tazo® Tea Drinks

Bottom Screenshot: The query window shows a query to select the beverage with the highest average calories for each category.

```
select Beverage
from [dbo].[drinkMenu]
where Calories = (select MAX(Calories) from [dbo].[drinkMenu])
/*-----*/
select AVG(Calories) as AVG , Beverage_category
from [dbo].[drinkMenu]
Group by [Beverage_category]
/*-----*/
select Beverage from drinkMenu
where Beverage_category= (select Beverage_category
from drinkMenu
group by Beverage_category
having avg(Calories)=(
select min(avg_x)
from (select AVG(Calories) as avg_x from [dbo].[drinkMenu]
Group by [Beverage_category]) r
));
```

The Results pane shows a table with 4 rows:

Beverage
Brewed Coffee
Brewed Coffee
Brewed Coffee
Brewed Coffee

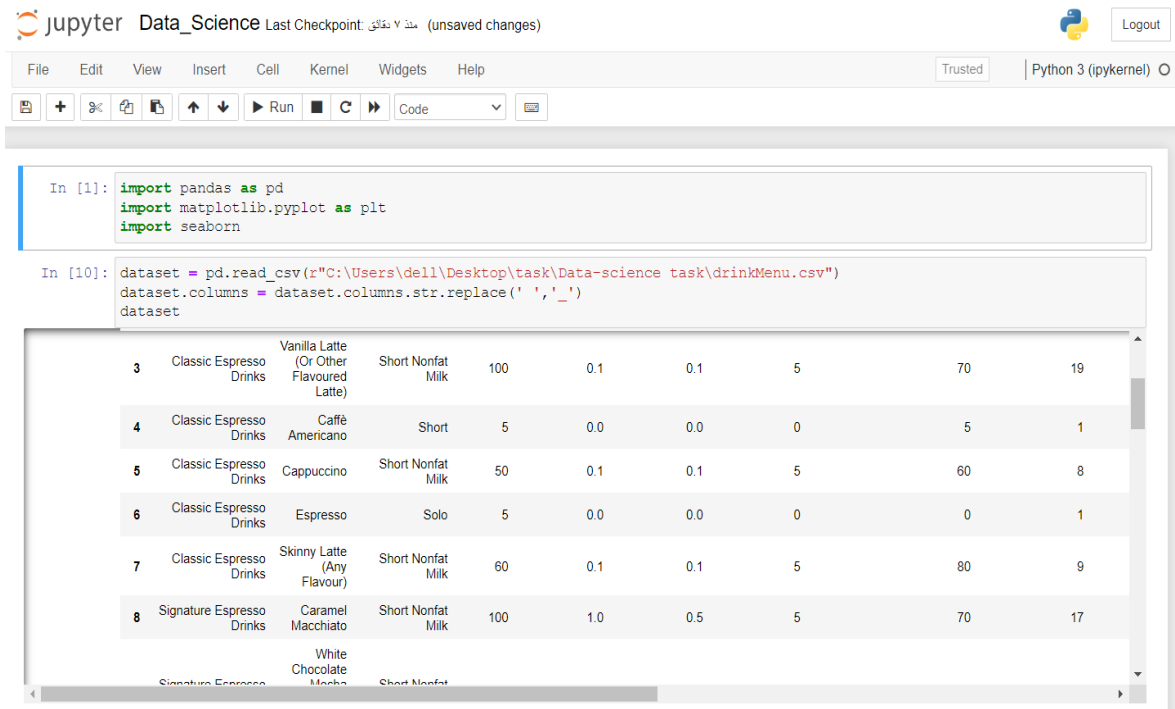
Data Science Task

Steps to import excel sheet to Jupyter Notebook:

1-open new python3 notebook

2-import the attached file

*Read csv file using pandas



The screenshot shows a Jupyter Notebook interface with the title "Data_Science". The code in the cells is as follows:

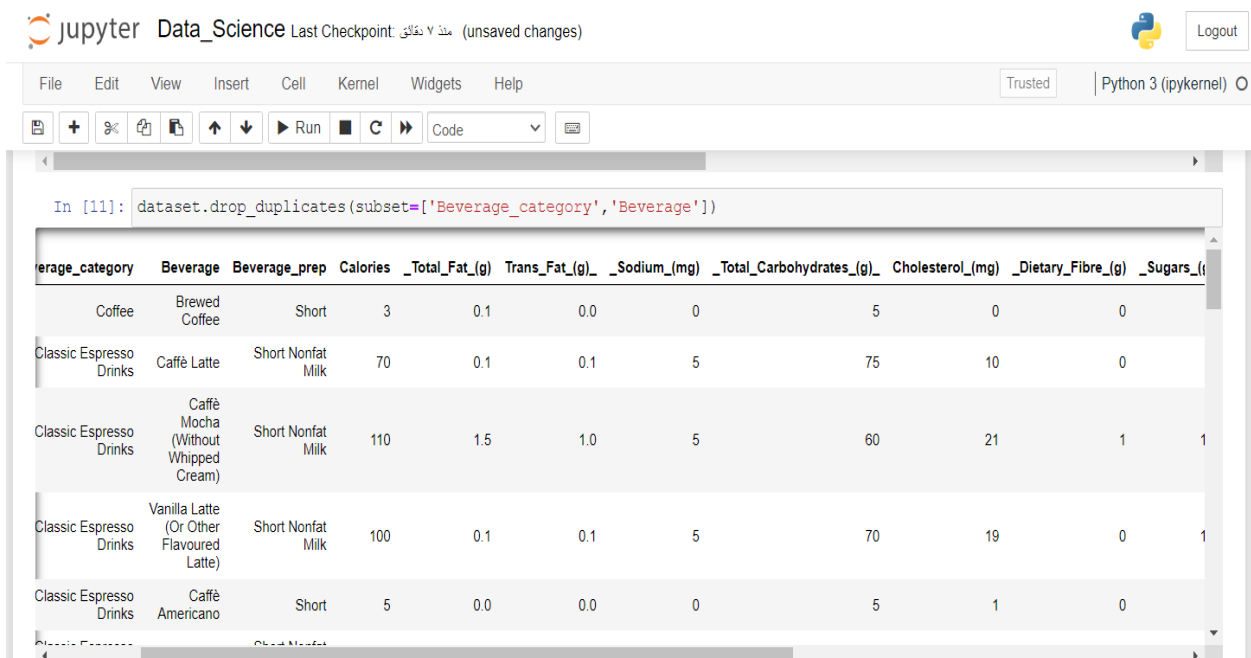
```
In [1]: import pandas as pd
import matplotlib.pyplot as plt
import seaborn
```

```
In [10]: dataset = pd.read_csv(r"C:\Users\dell\Desktop\task\Data-science task\drinkMenu.csv")
dataset.columns = dataset.columns.str.replace(' ', '_')
dataset
```

The output of the second cell is a table with 10 columns and 8 rows of data:

3	Classic Espresso Drinks	Vanilla Latte (Or Other Flavoured Latte)	Short Nonfat Milk	100	0.1	0.1	5	70	19
4	Classic Espresso Drinks	Caffè Americano	Short	5	0.0	0.0	0	5	1
5	Classic Espresso Drinks	Cappuccino	Short Nonfat Milk	50	0.1	0.1	5	60	8
6	Classic Espresso Drinks	Espresso	Solo	5	0.0	0.0	0	0	1
7	Classic Espresso Drinks	Skinny Latte (Any Flavour)	Short Nonfat Milk	60	0.1	0.1	5	80	9
8	Signature Espresso Drinks	Caramel Macchiato	Short Nonfat Milk	100	1.0	0.5	5	70	17
	Signature Espresso Drinks	White Chocolate Mocha	Short Nonfat						

*Drop duplicate data



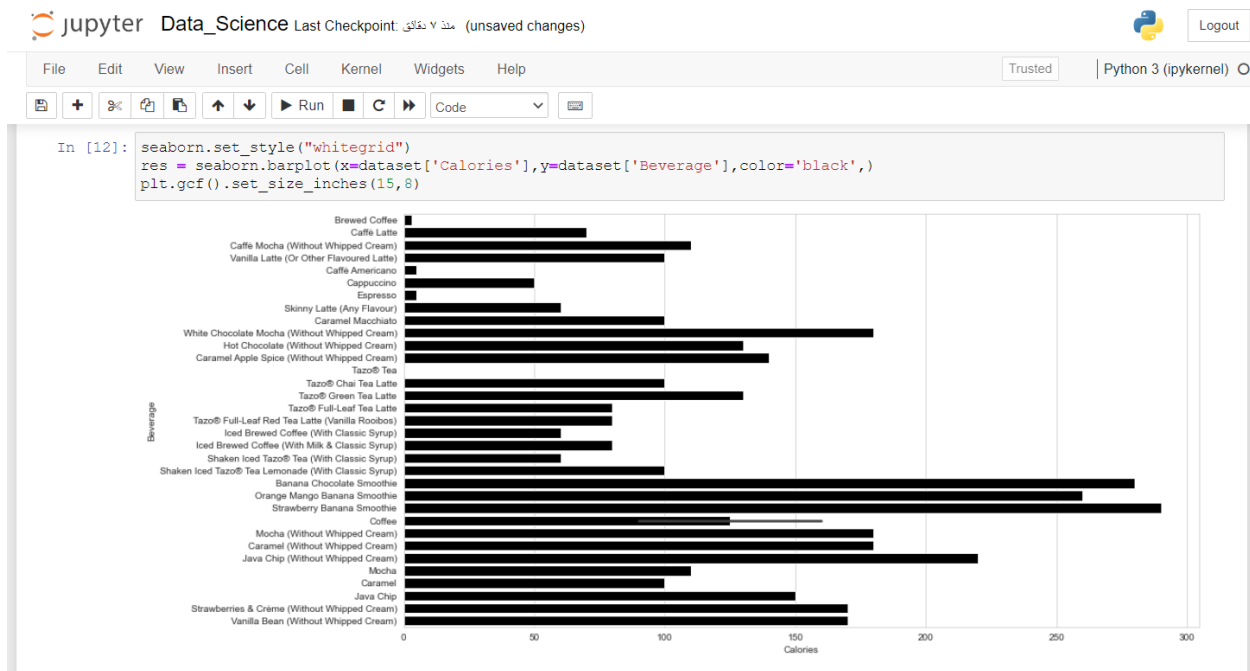
The screenshot shows a Jupyter Notebook interface with the title "Data_Science". The code in the cell is as follows:

```
In [11]: dataset.drop_duplicates(subset=['Beverage_category', 'Beverage'])
```

The output of the code is a table with 10 columns and 5 rows of data:

	Beverage_category	Beverage	Beverage_prep	Calories	_Total_Fat(g)	Trans_Fat(g)_	_Sodium(mg)	_Total_Carbohydrates(g)_	Cholesterol(mg)	_Dietary_Fibre(g)	_Sugars(g)
	Coffee	Brewed Coffee	Short	3	0.1	0.0	0	5	0	0	
	Classic Espresso Drinks	Caffè Latte	Short Nonfat Milk	70	0.1	0.1	5	75	10	0	
	Classic Espresso Drinks	Caffè Mocha (Without Whipped Cream)	Short Nonfat Milk	110	1.5	1.0	5	60	21	1	1
	Classic Espresso Drinks	Vanilla Latte (Or Other Flavoured Latte)	Short Nonfat Milk	100	0.1	0.1	5	70	19	0	1

*Plot drink that has the highest calories



*Plot Highest Sugar Drink

