ScreenShots Of The Project

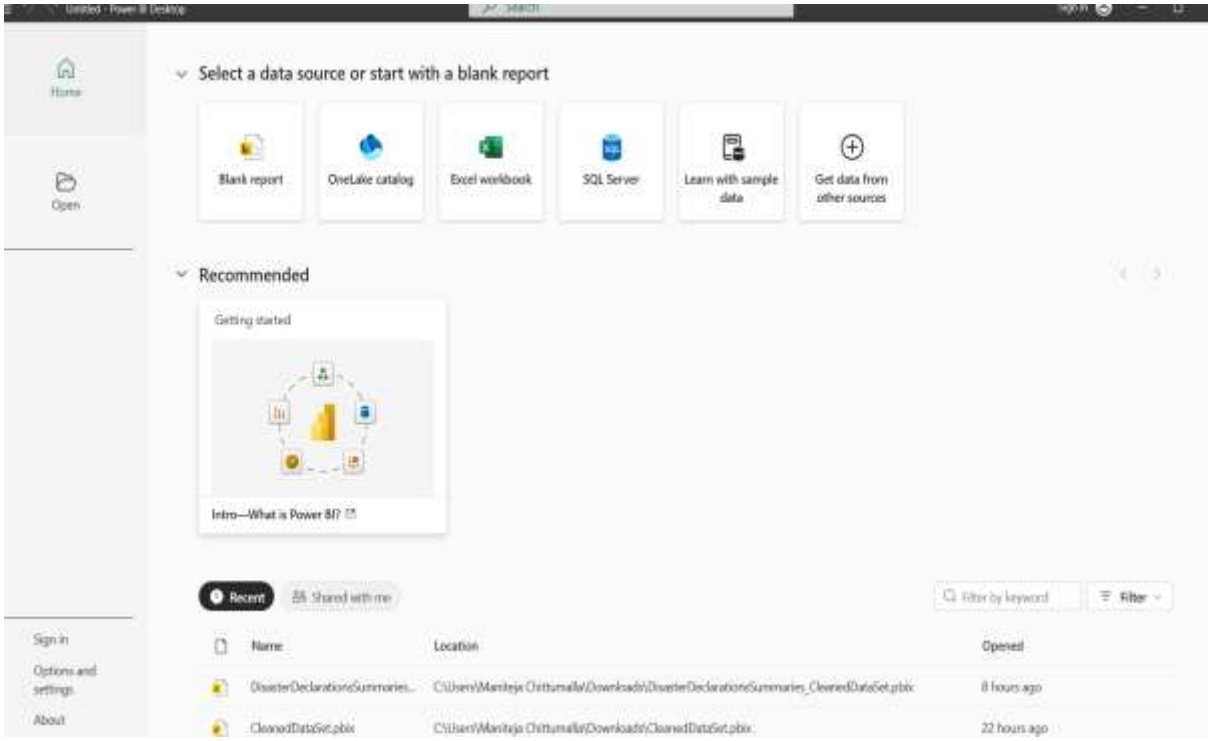


Figure 1 : PowerBI Desktop-Home Screen

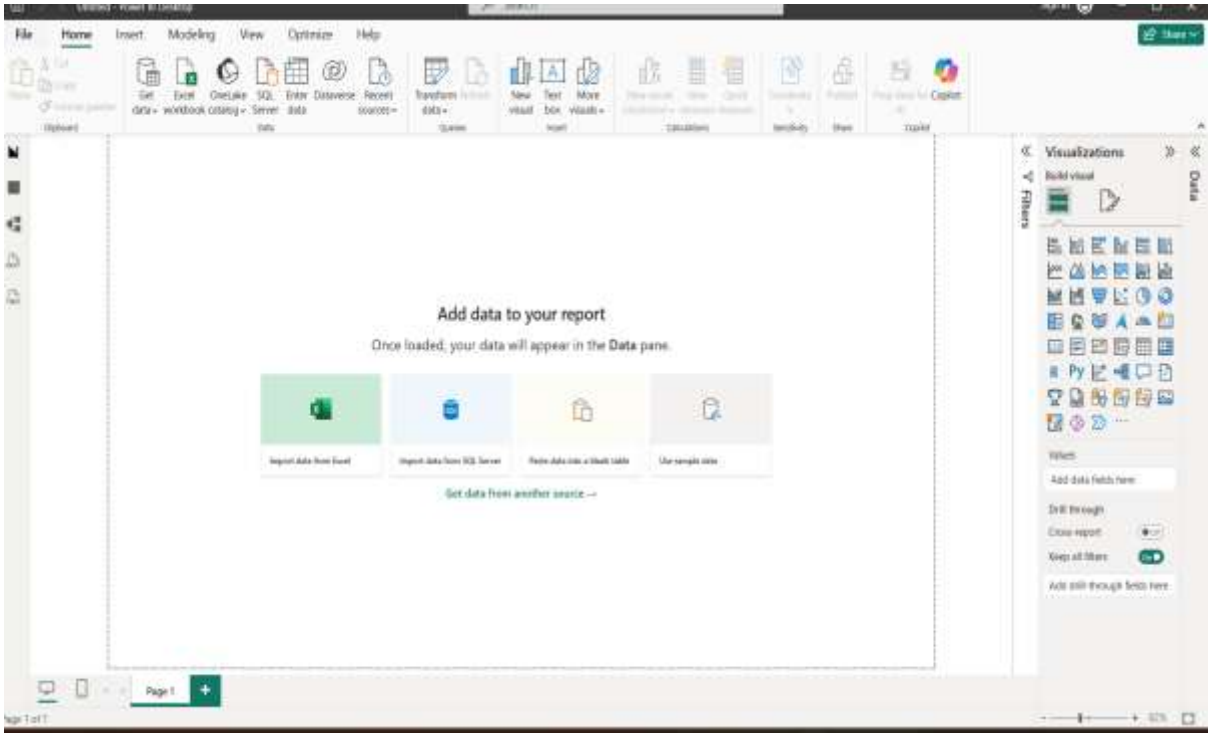


Figure 2: Report View

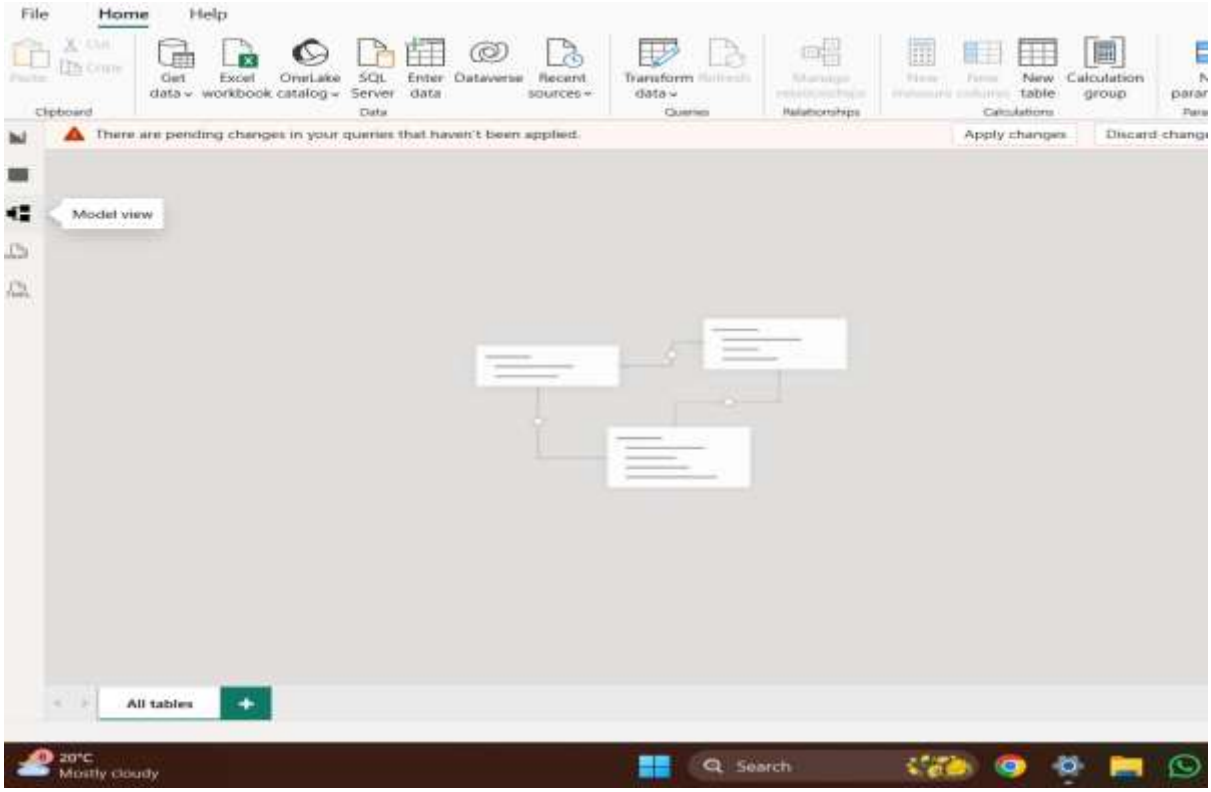


Figure 3: Model View

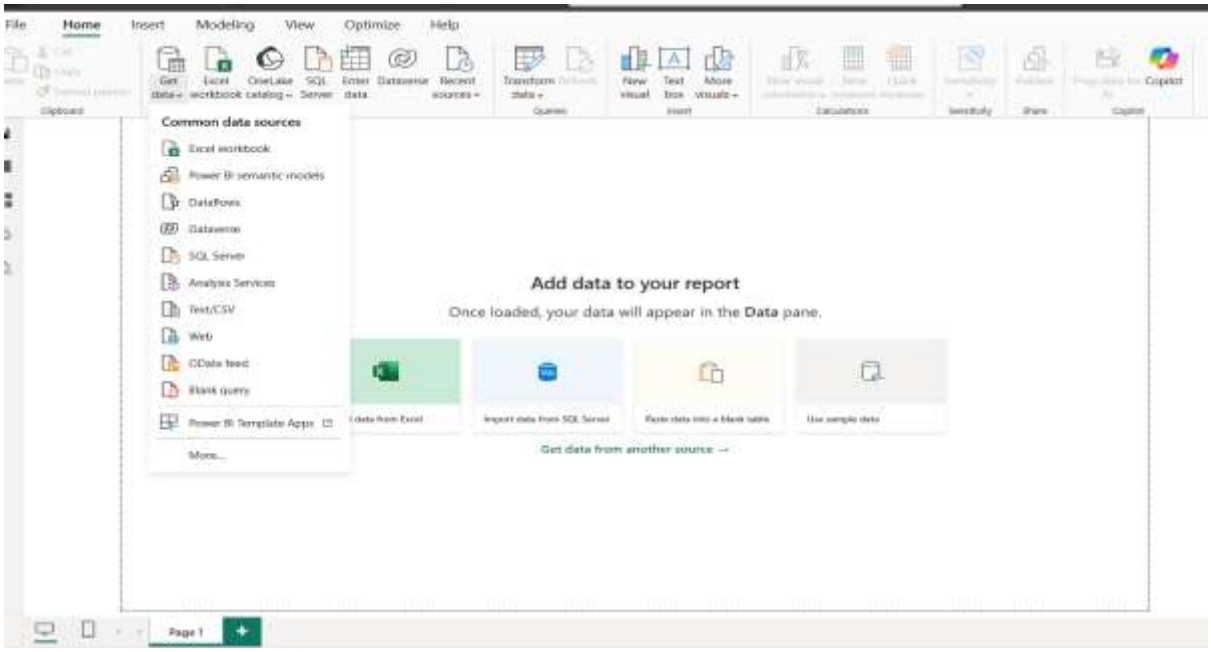


Figure 4: Power BI Desktop – Select Data Source Window

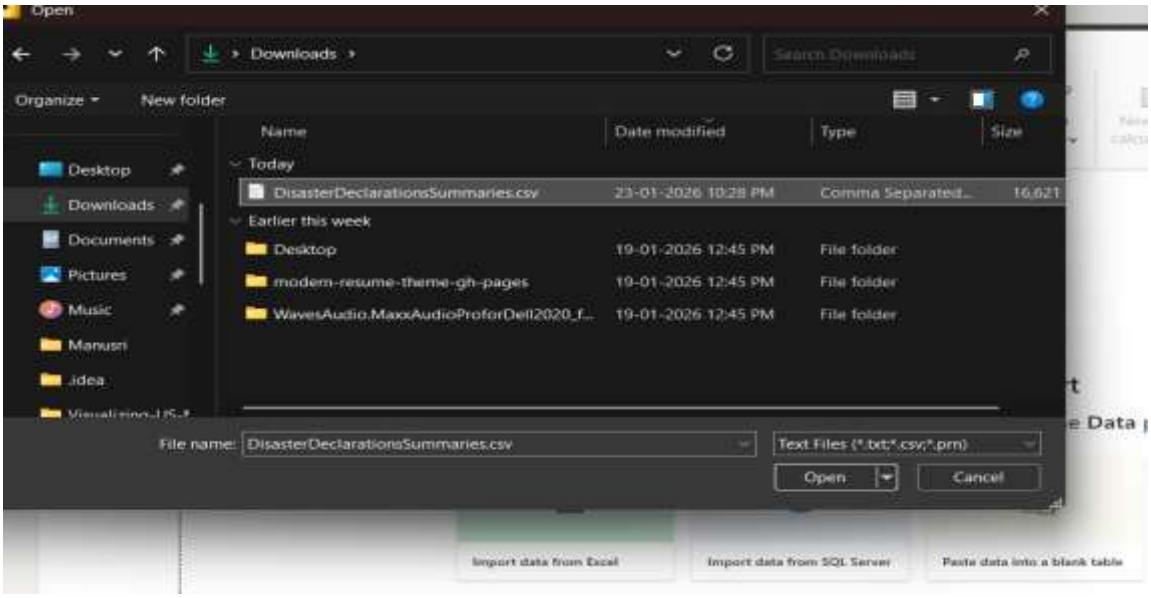


Figure 5 : Import the DataSet

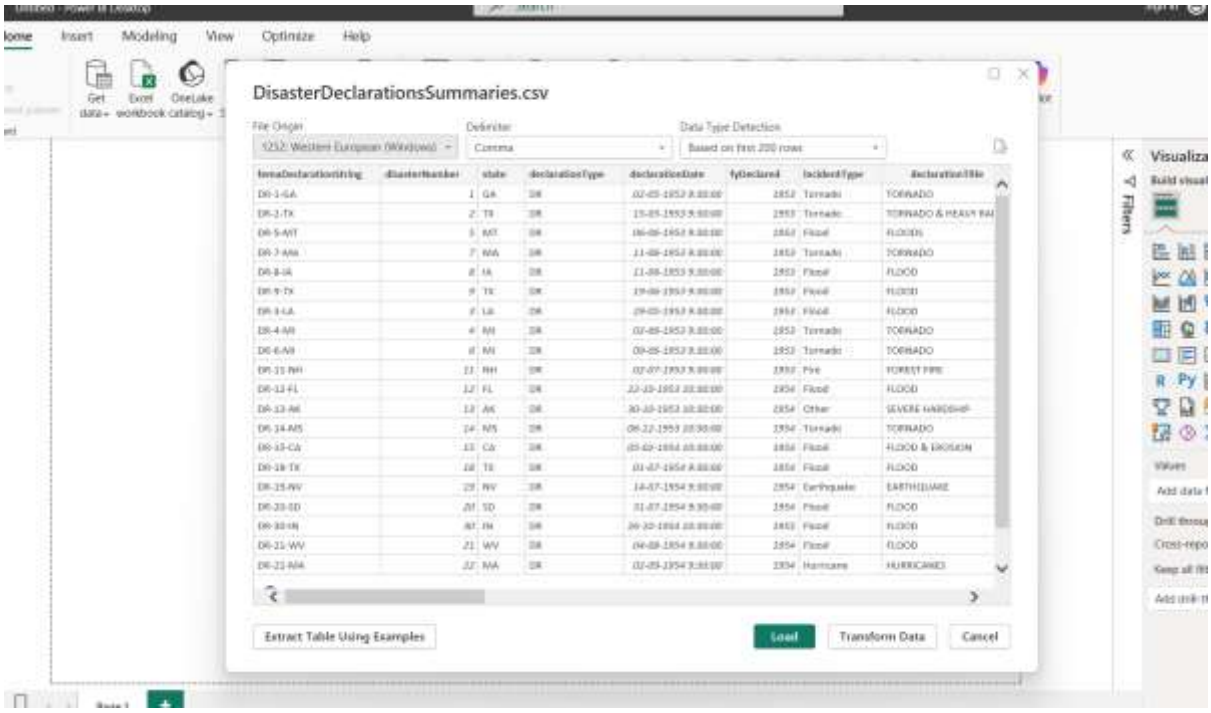


Figure 6: Importing Dataset for Transformations

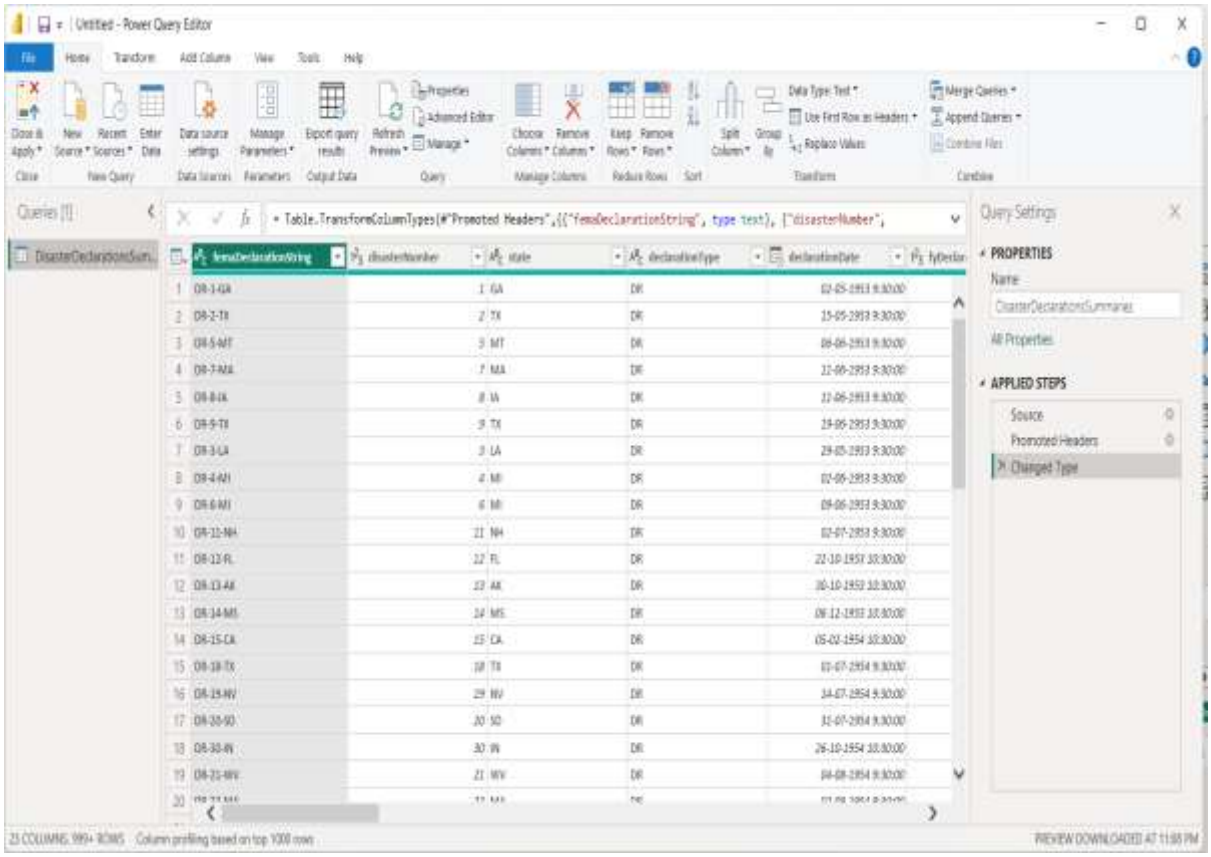
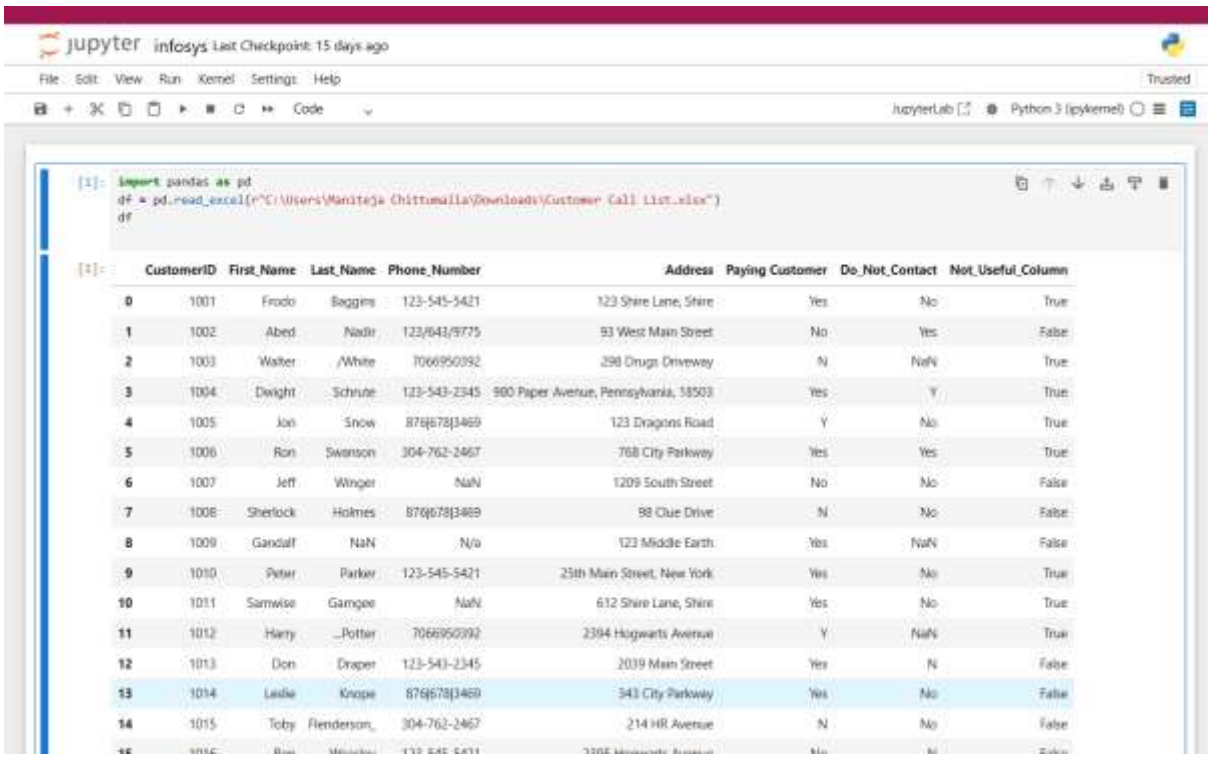


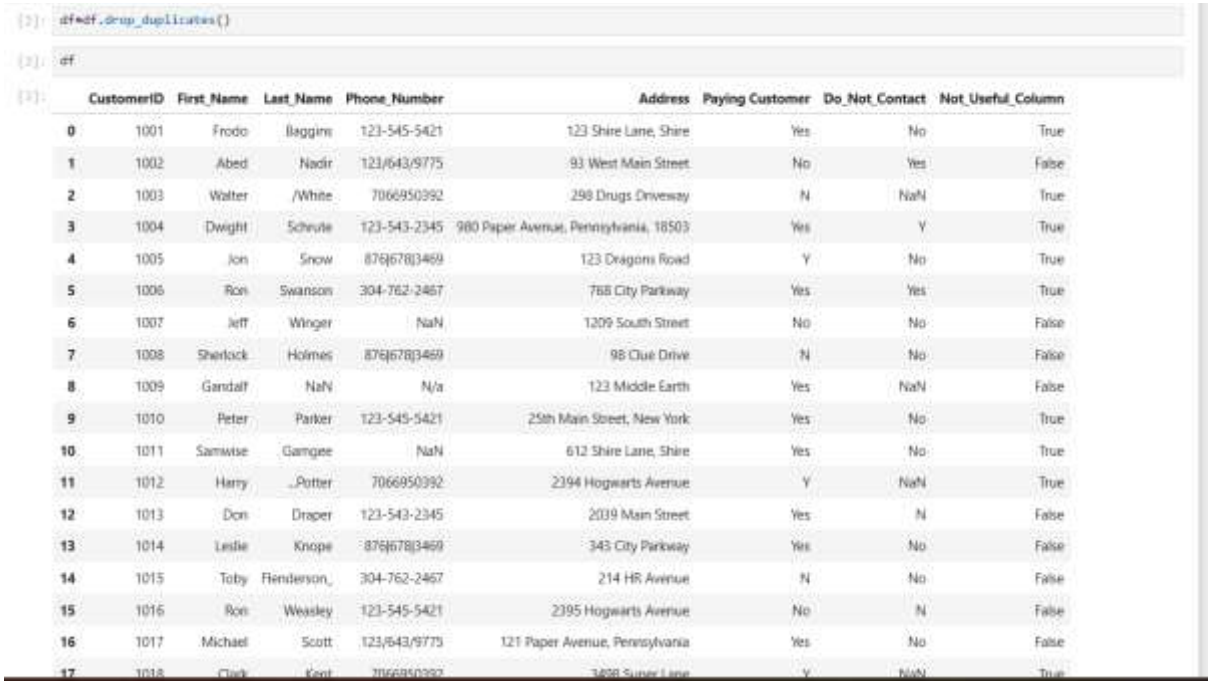
Figure 7: Power Query Editor

Data Cleaning Using PYTHON (JUPTER NOTEBOOK)



	CustomerID	First_Name	Last_Name	Phone_Number	Address	Paying Customer	Do_Not_Contact	Not_Useful_Column
0	1001	Frodo	Baggins	123-545-5421	123 Shire Lane, Shire	Yes	No	True
1	1002	Abed	Nadir	123/643/9775	93 West Main Street	No	Yes	False
2	1003	Walter	/White	7066950392	298 Drugs Driveway	N	NaN	True
3	1004	Dwight	Schrute	123-543-2345	980 Paper Avenue, Pennsylvania, 18503	Yes	Y	True
4	1005	Jon	Snow	876)678)3469	123 Dragons Road	Y	No	True
5	1006	Ron	Swanson	304-762-2467	768 City Parkway	Yes	Yes	True
6	1007	Jeff	Winger	NaN	1209 South Street	No	No	False
7	1008	Sherlock	Holmes	876)678)3469	98 Clue Drive	N	No	False
8	1009	Gandalf	NaN	N/a	123 Middle Earth	Yes	NaN	False
9	1010	Peter	Parker	123-545-5421	25th Main Street, New York	Yes	No	True
10	1011	Samwise	Gamgee	NaN	612 Shire Lane, Shire	Yes	No	True
11	1012	Harry	_Potter	7066950392	2394 Hogwarts Avenue	Y	NaN	True
12	1013	Don	Draper	123-543-2345	2039 Main Street	Yes	N	False
13	1014	Leslie	Knope	876)678)3469	343 City Parkway	Yes	No	False
14	1015	Toby	Flenderson_	304-762-2467	214 HR Avenue	N	No	False

Figure 1: Importing our Dataset



	CustomerID	First_Name	Last_Name	Phone_Number	Address	Paying Customer	Do_Not_Contact	Not_Useful_Column
0	1001	Frodo	Baggins	123-545-5421	123 Shire Lane, Shire	Yes	No	True
1	1002	Abed	Nadir	123/643/9775	93 West Main Street	No	Yes	False
2	1003	Walter	/White	7066950392	298 Drugs Driveway	N	NaN	True
3	1004	Dwight	Schrute	123-543-2345	980 Paper Avenue, Pennsylvania, 18503	Yes	Y	True
4	1005	Jon	Snow	876)678)3469	123 Dragons Road	Y	No	True
5	1006	Ron	Swanson	304-762-2467	768 City Parkway	Yes	Yes	True
6	1007	Jeff	Winger	NaN	1209 South Street	No	No	False
7	1008	Sherlock	Holmes	876)678)3469	98 Clue Drive	N	No	False
8	1009	Gandalf	NaN	N/a	123 Middle Earth	Yes	NaN	False
9	1010	Peter	Parker	123-545-5421	25th Main Street, New York	Yes	No	True
10	1011	Samwise	Gamgee	NaN	612 Shire Lane, Shire	Yes	No	True
11	1012	Harry	_Potter	7066950392	2394 Hogwarts Avenue	Y	NaN	True
12	1013	Don	Draper	123-543-2345	2039 Main Street	Yes	N	False
13	1014	Leslie	Knope	876)678)3469	343 City Parkway	Yes	No	False
14	1015	Toby	Flenderson_	304-762-2467	214 HR Avenue	N	No	False
15	1016	Ron	Weasley	123-545-5421	2395 Hogwarts Avenue	No	N	False
16	1017	Michael	Scott	123/643/9775	121 Paper Avenue, Pennsylvania	Yes	No	False

Figure 2: Removing Duplicates

```
df["Last_Name"] = df["Last_Name"].str.strip("...")  # or we can also write in single line df["Last_Name"] = df["Last_Name"].str.strip("./_")
df["Last_Name"] = df["Last_Name"].str.strip("/")
df["Last_Name"] = df["Last_Name"].str.strip("_")
df
```

	CustomerID	First_Name	Last_Name	Phone_Number	Address	Paying Customer	Do_Not_Contact	Not_Useful_Column
0	1001	Frodo	Baggins	123-545-5421	123 Shire Lane, Shire	Yes	No	True
1	1002	Abed	Nadir	123/643/9775	93 West Main Street	No	Yes	False
2	1003	Walter	White	7066950392	298 Drugs Driveway	N	NaN	True
3	1004	Dwight	Schrute	123-543-2345	980 Paper Avenue, Pennsylvania, 18503	Yes	Y	True
4	1005	Jon	Snow	876)678)3469	123 Dragons Road	Y	No	True
5	1006	Ron	Swanson	304-762-2467	768 City Parkway	Yes	Yes	True

Figure 3: Strip Function

```
df["Paying Customer"] = df["Paying Customer"].str.replace("Yes", "Y")
df["Paying Customer"] = df["Paying Customer"].str.replace("No", "N")
df["Do_Not_Contact"] = df["Do_Not_Contact"].str.replace("Yes", "Y")
df["Do_Not_Contact"] = df["Do_Not_Contact"].str.replace("No", "N")
df
```

	CustomerID	First_Name	Last_Name	Phone_Number	Address	Paying Customer	Do_Not_Contact	Not_Useful_Column
0	1001	Frodo	Baggins	1235455421	123 Shire Lane, Shire	Y	N	True
1	1002	Abed	Nadir	1236439775	93 West Main Street	N	Y	False
2	1003	Walter	White	NaN	298 Drugs Driveway	N	NaN	True
3	1004	Dwight	Schrute	1235432345	980 Paper Avenue, Pennsylvania, 18503	Y	Y	True
4	1005	Jon	Snow	8766783469	123 Dragons Road	Y	N	True
5	1006	Ron	Swanson	3047622467	768 City Parkway	Y	Y	True
6	1007	Jeff	Winger	NaN	1209 South Street	N	N	False
7	1008	Sherlock	Holmes	8766783469	98 Clue Drive	N	N	False
8	1009	Gandalf	NaN	Na	123 Middle Earth	Y	NaN	False
9	1010	Peter	Parker	1235455421	25th Main Street, New York	Y	N	True
10	1011	Samwise	Gamgee	NaN	612 Shire Lane, Shire	Y	N	True
11	1012	Harry	Potter	NaN	2394 Hogwarts Avenue	Y	NaN	True
12	1013	Don	Draper	1235432345	2039 Main Street	Y	N	False
13	1014	Leslie	Knope	8766783469	343 City Parkway	Y	N	False
14	1015	Toby	Flenderson	3047622467	214 HR Avenue	N	N	False
15	1016	Ron	Weasley	1235455421	2395 Hogwarts Avenue	N	N	False
16	1017	Michael	Scott	1236439775	121 Paper Avenue, Pennsylvania	Y	N	False
17	1018	Clark	Kent	NaN	3498 Super Lane	Y	NaN	True
18	1019	Creed	Braton	Na	N/a	N/a	Y	True
19	1020	Anakin	Skywalker	8766783469	910 Tatooine Road, Tatooine	Y	N	True

Figure 4: Replace Function

```
df=df.drop(columns=["Not_Useful_Column"])
df
```

	CustomerID	First_Name	Last_Name	Phone_Number	Address	Paying Customer	Do_Not_Contact
0	1001	Frodo	Baggins	1235455421	123 Shire Lane, Shire	Y	N
1	1002	Abed	Nadir	1236439775	93 West Main Street	N	Y
2	1003	Walter	White	NaN	298 Drugs Driveway	N	NaN
3	1004	Dwight	Schrute	1235432345	980 Paper Avenue, Pennsylvania, 18503	Y	Y
4	1005	Jon	Snow	8766783469	123 Dragons Road	Y	N
5	1006	Ron	Swanson	3047622467	768 City Parkway	Y	Y
6	1007	Jeff	Winger	NaN	1209 South Street	N	N
7	1008	Sherlock	Holmes	8766783469	98 Clue Drive	N	N
8	1009	Gandalf	NaN	Na	123 Middle Earth	Y	NaN
9	1010	Peter	Parker	1235455421	25th Main Street, New York	Y	N
10	1011	Samwise	Gamgee	NaN	612 Shire Lane, Shire	Y	N
11	1012	Harry	Potter	NaN	2394 Hogwarts Avenue	Y	NaN
12	1013	Don	Draper	1235432345	2039 Main Street	Y	N
13	1014	Leslie	Knope	8766783469	343 City Parkway	Y	N
14	1015	Toby	Flenderson	3047622467	214 HR Avenue	N	N
15	1016	Ron	Weasley	1235455421	2395 Hogwarts Avenue	N	N
16	1017	Michael	Scott	1236439775	121 Paper Avenue, Pennsylvania	Y	N
17	1018	Clark	Kent	NaN	3498 Super Lane	Y	NaN

Figure 5: Removing The Unwanted Columns