ConsumerData

```
In [25]: import pandas as pd
```

```
In [35]: Data = r'C:\Users\User\Downloads\consumer data.xlsx'
```

```
In [36]: ConsumerData = pd.read_excel(Data)
```

```
In [37]: ConsumerData
```

Out[37]:

	Consumer ID	Name	Address	Contact Number	Email	Account Number	Meter Number	Tariff Plan	Consumption History	Payment Status
0	101	Rohan Jadhav	123 Main Street Anytown, USA	9876543213	rj@gmail.com	5555555555	11112	990	A1	Paid
1	102	Shruti patil	456 Greenfield Road, New Delhi, Delhi 110001	6978543663	sp@gmail.com	9998887776	11334	809	A2	Paid
2	103	Joy ohal	101 Rose Garden, Kolkata, West Bengal 700001	5678536663	jo@gmail.com	7777777777	22876	709	A4	Paid
3	112	Rohain gupta	789 Church Road, Birmingham B15 3TW	9988776633	rg@gmail.com	4444444444	99098	609	B1	Unpaid
4	116	Sonal Sha	23 Sunshine Colony, Mumbai, Maharashtra 400001	9089686432	ss@gmail.com	1111222233	98780	409	C3	Unpaid
5	222	Rohani Shron	234 Bridge Street, Cardiff CF10 2TU	3098753444	rs@gmail.com	1111222239	12345	567	C5	Paid
6	911	Rony Roy	234 Riverbank Avenue, Chennai, Tamil Nadu 600001	6453789212	rr@gmail.com	3333333333	65432	304	B3	Unpaid
7	109	Shwon Bal	101 Elm Street, Los Angeles, CA 90001	1256478634	sb@gmail.com	9998887776	34562	209	C2	Paid
8	134	Anjali Jadha	456 High Street, Manchester M2 4GB	8986354609	aj@gmail.com	3333333556	90876	345	B4	Unpaid
9	98	Rahul Kadam	567 Pine Avenue, Houston, TX 77001	8906545438	rk@gmail.com	12345678890	12345	234	C1	Unpaid

```
In [44]: ConsumerData.shape
```

Out[44]: (10, 10)

Smart360

```
In [38]: Data1 = r'C:\Users\User\Downloads\smart360.xlsx'
```

```
In [39]: Smart360 = pd.read_excel(Data1)
```

```
In [40]: Smart360
```

	Consumer ID	Name	Last Name	Address Line 1	Address Line 2	City	State	Zip Code	Phone Number	Email
0	101	Rohan	Jadhav	123 Main Street Anytown, USA	Anytown, USA	Texes	USA	110022	9876543213	rj@gmail.com
1	102	Shruti	patil	456 Greenfield Road, New Delhi, Delhi 110001	New Delhi, Delhi 110001	Chandani	Delhi	110001	6978543663	sp@gmail.com
2	103	Joy	ohal	101 Rose Garden, Kolkata, West Bengal 700001	West Bengal 700001	Bohar	Bengal	700001	5678536663	jo@gmail.com
3	112	Rohain	gupta	789 Church Road, Birmingham B15 3TW	Birmingham B15 3TW	Blome	UK	123309	9988776633	rg@gmail.com
4	116	Sonal	Sha	23 Sunshine Colony, Mumbai, Maharashtra 400001	Mumbai,	Bandra	Maharashtra	400001	9089686432	ss@gmail.com
5	107	Rohani	Shron	234 Bridge Street, Cardiff CF10 2TU	Cardiff CF10 2TU	Cord	UK	123400	3098753444	rs@gmail.com
6	198	Emily	Johnson	101 Queen's Road, Glasgow G1 3DX	Glasgow G1 3DX	swis	USA	33440	9087987564	ej@gmail.com
7	230	Michael	Davis	567 Pine Avenue, Houston, TX 77001	TX 77001	new york	UK	33345	998877644	md@gmail.com
8	278	Gauri	Khan	234 Riverbank Avenue, Chennai, Tamil Nadu 600001	Tamil Nadu 600001	chennai	Tamil nadu	444444	4455634245	gk@gmail.com
9	899	Jessica	Wilson	234 Cedar Lane, Chicago, IL 60601	IL 60601	chicago	USA	344562	1230987654	jw@gmail.com

In [45]: `Smart360.shape`

Out[45]: `(10, 10)`

Extracted Data

In [41]:
```python
import pandas as pd

# Path to the source Excel file (extracted data)
source_file_path = r'C:\Users\User\Downloads\consumer data.xlsx'

# Path to the mapping Excel file
mapping_file_path = r'C:\Users\User\Downloads\smart360.xlsx'

# Read the source and mapping Excel files into pandas DataFrames
try:
    source_df = pd.read_excel(source_file_path)
    mapping_df = pd.read_excel(mapping_file_path)

    # Perform the mapping based on common columns
    merged_df = pd.merge(source_df, mapping_df, how='inner', on='Consumer ID')

    # Display the merged DataFrame
    print(merged_df)

    # Now you can further process the merged data as needed
except FileNotFoundError:
    print(f"File not found.")
except Exception as e:
    print(f"An error occurred: {e}")
```

```
     Consumer ID          Name                                    Address  \
0           101  Rohan  Jadhav                    123 Main Street Anytown, USA
1           102   Shruti patil    456 Greenfield Road, New Delhi, Delhi 110001
2           103       Joy ohal    101 Rose Garden, Kolkata, West Bengal 700001
3           112   Rohain gupta              789 Church Road, Birmingham B15 3TW
4           116      Sonal Sha  23 Sunshine Colony, Mumbai, Maharashtra 400001

     Contact Number        Email_x  Account Number  Meter Number  Tariff Plan  \
0       9876543213   rj@gmail.com      5555555555         11112          990
1       6978543663   sp@gmail.com      9998887776         11334          809
2       5678536663   jo@gmail.com      7777777777         22876          709
3       9988776633   rg@gmail.com      4444444444         99098          609
4       9089686432   ss@gmail.com      1111222233         98780          409

  Consumption History Payment Status      Name Last Name  \
0                  A1           Paid   Rohan     Jadhav
1                  A2           Paid   Shruti     patil
2                  A4           Paid     Joy      ohal
3                  B1         Unpaid   Rohain     gupta
4                  C3         Unpaid    Sonal       Sha

                                Address Line 1           Address Line 2  \
0                   123 Main Street Anytown, USA             Anytown, USA
1     456 Greenfield Road, New Delhi, Delhi 110001  New Delhi, Delhi 110001
2       101 Rose Garden, Kolkata, West Bengal 700001      West Bengal 700001
3               789 Church Road, Birmingham B15 3TW        Birmingham B15 3TW
4  23 Sunshine Colony, Mumbai, Maharashtra 400001                  Mumbai,

       City        State  Zip Code  Phone Number          Email_y
0     Texes          USA    110022    9876543213   rj@gmail.com
1  Chandani        Delhi    110001    6978543663   sp@gmail.com
2     Bohar       Bengal    700001    5678536663   jo@gmail.com
3     Blome           UK    123309    9988776633   rg@gmail.com
4    Bandra  Maharashtra    400001    9089686432   ss@gmail.com
```

In [46]: `ConsumerData.shape`

Out[46]: (10, 10)

In [47]: `Smart360.shape`

Out[47]: (10, 10)

In [48]: `merged_df.shape`

Out[48]: (5, 19)

In [ ]: