## ConsumerData

```
In [25]:
           import pandas as pd
           Data = r'C:\Users\Shruti Khivansara\Downloads\consumer data.xlsx'
           ConsumerData = pd.read_excel(Data)
           ConsumerData
In [37]
Out[37]:
                Consumer
                                                                                               Contact
                                                                                                                              Account
                                                                                                                                               Meter
                                                                                                                                                           Tariff
                                                                                                                                                                         Consumption
                                                                                                                                                                                              Payment
                                  Name
                                                                             Address
                                                                                                               Email
                       ID
                                                                                              Number
                                                                                                                              Number
                                                                                                                                                            Plan
                                                                                                                                                                               History
                                                                                                                                                                                                Status
                                                                                                                                             Number
                                  Rohan
           0
                       101
                                                                                                                                                             990
                                                           123 Main Street Anytown, USA
                                                                                           9876543213
                                                                                                        rj@gmail.com
                                                                                                                           555555555
                                                                                                                                                11112
                                                                                                                                                                                   A1
                                                                                                                                                                                                 Paid
                                  Jadhav
           1
                       102
                              Shruti patil
                                              456 Greenfield Road, New Delhi, Delhi 110001
                                                                                                       sp@gmail.com
                                                                                                                           9998887776
                                                                                                                                                11334
                                                                                                                                                             809
                                                                                                                                                                                   A2
                                                                                           6978543663
                                                                                                                                                                                                 Paid
           2
                       103
                                Joy ohal
                                             101 Rose Garden, Kolkata, West Bengal 700001
                                                                                           5678536663
                                                                                                        jo@gmail.com
                                                                                                                           777777777
                                                                                                                                                22876
                                                                                                                                                             709
                                                                                                                                                                                   A4
                                                                                                                                                                                                 Paid
           3
                       112 Rohain gupta
                                                   789 Church Road, Birmingham B15 3TW
                                                                                           9988776633
                                                                                                        rg@gmail.com
                                                                                                                           444444444
                                                                                                                                                99098
                                                                                                                                                             609
                                                                                                                                                                                   В1
                                                                                                                                                                                               Unpaid
           4
                                         23 Sunshine Colony, Mumbai, Maharashtra 400001
                                                                                                                                                                                   C3
                       116
                               Sonal Sha
                                                                                           9089686432
                                                                                                        ss@gmail.com
                                                                                                                           1111222233
                                                                                                                                                98780
                                                                                                                                                             409
                                                                                                                                                                                               Unpaid
           5
                       222 Rohani Shron
                                                       234 Bridge Street, Cardiff CF10 2TU
                                                                                           3098753444
                                                                                                        rs@gmail.com
                                                                                                                           1111222239
                                                                                                                                                12345
                                                                                                                                                             567
                                                                                                                                                                                   C5
                                                                                                                                                                                                 Paid
                                               234 Riverbank Avenue, Chennai, Tamil Nadu
           6
                      911
                               Rony Roy
                                                                                           6453789212
                                                                                                        rr@gmail.com
                                                                                                                           333333333
                                                                                                                                                65432
                                                                                                                                                             304
                                                                                                                                                                                   В3
                                                                                                                                                                                               Unpaid
                                                                               600001
           7
                                                    101 Elm Street, Los Angeles, CA 90001
                                                                                                       sb@gmail.com
                                                                                                                           9998887776
                                                                                                                                                34562
                                                                                                                                                                                   C2
                       109
                               Shwon Bal
                                                                                           1256478634
                                                                                                                                                             209
                                                                                                                                                                                                 Paid
           8
                             Anjali Jadha
                                                     456 High Street, Manchester M2 4GB
                                                                                                        ai@gmail.com
                                                                                                                           333333556
                                                                                                                                                90876
                                                                                                                                                             345
                                                                                                                                                                                   В4
                                                                                                                                                                                               Unpaid
                       134
                                                                                           8986354609
                                                                                                                                                                                   C1
                                                                                                                                                                                               Unpaid
                           Rahul Kadam
                                                     567 Pine Avenue, Houston, TX 77001
                                                                                           8906545438
                                                                                                       rk@gmail.com
                                                                                                                          12345678890
                                                                                                                                                12345
                                                                                                                                                             234
```

In [44]: ConsumerData.shape

Out[44]: (10, 10

## Smart360

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

In [39]: Smart360 = pd.read\_excel(Data1)

In [40]: Smart360

Out[40]:		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]: import pandas as pd
         # Path to the source Excel file (extracted data)
         source_file_path = r'C:\Users\Shruti Khivansara\Downloads\consumer data.xlsx'
         # Path to the mapping Excel file
         mapping_file_path = r'C:\Users\Shruti Khivansara\Downloads\smart360.xlsx'
         # Read the source and mapping Excel files into pandas DataFrames
             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}")
```

```
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
                    116
                             Sonal Sha 23 Sunshine Colony, Mumbai, Maharashtra 400001
             Contact Number
                                 Email_x Account Number Meter Number Tariff Plan \
                9876543213
                                                                 11112
                                                                                990
                            rj@gmail.com
                                              555555555
                                                                 11334
                                                                                809
         1
                 6978543663
                            sp@gmail.com
                                              9998887776
         2
                5678536663
                            jo@gmail.com
                                              777777777
                                                                 22876
                                                                                709
         3
                 9988776633 rg@gmail.com
                                              444444444
                                                                 99098
                                                                                609
                                              1111222233
                 9089686432 ss@gmail.com
                                                                 98780
                                                                                409
            Consumption History Payment Status
                                                  Name Last Name \
                            Α1
                                         Paid Rohan
                                                          Jadhav
                            A2
         1
                                         Paid Shruti
                                                           patil
         2
                            Α4
                                         Paid
                                                  Joy
                                                            ohal
         3
                            В1
                                       Unpaid Rohain
                                                           gupta
                            C3
                                                 Sonal
                                       Unpaid
                                                             Sha
                                            Address Line 1
                                                                     Address Line 2 \
         0
                              123 Main Street Anvtown, USA
                                                                       Anytown, USA
         1
              456 Greenfield Road, New Delhi, Delhi 110001
                                                            New Delhi, Delhi 110001
              101 Rose Garden, Kolkata, West Bengal 700001
         2
                                                                 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
               Texes
                              USA
                                     110022
                                               9876543213 rj@gmail.com
                                                           sp@gmail.com
         1
            Chandani
                            Delhi
                                     110001
                                               6978543663
                                     700001
                                               5678536663
                                                           jo@gmail.com
               Bohar
                           Bengal
         3
               Blome
                               UK
                                     123309
                                               9988776633
                                                          rg@gmail.com
              Bandra Maharashtra
                                     400001
                                               9089686432 ss@gmail.com
         ConsumerData.shape
          (10, 10)
Out[46]:
         Smart360.shape
         (10, 10)
Out[47]:
         merged_df.shape
Out[48]: (5, 19)
```

Address \

Consumer ID

Name