

```
In [1]: import pandas as pd
```

```
In [2]: a=pd.read_csv("C:\All Datasets\HousePrice.csv")
```

```
In [3]: a
```

Out[3]:

SQARE_FT	READY_TO_MOVE	RESALE	ADDRESS	LONGITUDE	LATITUDE	TARGET(PRICE)
00.236407	1	1	Ksfc Layout,Bangalore	12.969910	77.597960	
75.000000	1	1	Vishweshwara Nagar,Mysore	12.274538	76.644605	
33.159722	1	1	Jigani,Bangalore	12.778033	77.632191	
29.921143	1	1	Sector-1 Vaishali,Ghaziabad	28.642300	77.344500	
99.009247	0	1	New Town,Kolkata	22.592200	88.484911	
...	...	...	...	...	...	...
00.000000	1	1	Shamshabad Road,Agra	27.140626	78.043277	
69.230769	1	1	E3-108, Lake View Recidency,,Vapi	39.945409	-86.150721	
22.641509	1	1	Ajmer Road,Jaipur	26.928785	75.828002	
27.079009	1	1	Sholinganallur,Chennai	12.900150	80.227910	
96.774194	1	1	Jagatpura,Jaipur	26.832353	75.841749	



```
In [ ]:
```

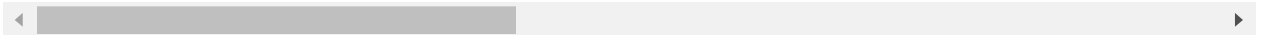
```
In [4]: a=pd.read_csv("C:\All Datasets\HousePrice.csv")
```

```
In [5]: a[["A","B","C","D","E","F"]]=a["ADDRESS"].str.split(", ",expand=True)
a
```

Out[5]:

	POSTED_BY	UNDER_CONSTRUCTION	RERA	BHK_NO.	BHK_OR_RK	SQUARE_FT	READ
0	Owner	0	0	2	BHK	1300.236407	
1	Dealer	0	0	2	BHK	1275.000000	
2	Owner	0	0	2	BHK	933.159722	
3	Owner	0	1	2	BHK	929.921143	
4	Dealer	1	0	2	BHK	999.009247	
...	...	...	...	...	...	...	...
29446	Owner	0	0	3	BHK	2500.000000	
29447	Owner	0	0	2	BHK	769.230769	
29448	Dealer	0	0	2	BHK	1022.641509	
29449	Owner	0	0	2	BHK	927.079009	
29450	Dealer	0	1	2	BHK	896.774194	

29451 rows × 18 columns



```
In [6]: a["C"].unique()
```

```
Out[6]: array([None, 'Bangalore', ' Pethapur Crossing', 'Chennai', 'Nagpur',
                'Ranchi', 'Goa', 'Kolkata', ' Coimbatore District', 'Mumbai',
                'Jaipur', ' Santacruz East', 'Gandhinagar', 'Kochi', 'Pune',
                ' Before Maruti Automotive', 'Asansol', 'Palwal', 'Surat',
                'Raipur', ' Tal- Malvan', 'Bharuch', 'Vadodara', 'Shimla',
                'Nellore', 'Haldwani', 'Karjat', 'Ongole', 'Lalitpur', 'Lucknow',
                'Secunderabad', ' Dighi', 'Karad', ' Gokul Vihar Society',
                'Gurdaspur', 'Srikakulam', 'Indore', ' Manjari', 'Maharashtra',
                ' Ckikkakamma halli', 'Dehradun', 'Jamnagar', 'Raigad', 'Agra',
                'Yavatmal', ' Kathirvedu Village', 'Vijayawada', 'Rajkot',
                'Warangal', 'phase', 'Morbi', 'Ghaziabad', 'Varanasi', 'Madurai',
                'Nainital', 'Bhavnagar', 'Rewa', 'Sanganer', ' Electronic City',
                ' Mayu', 'Korba', ' Narashima Sw', 'Dalhousie', 'Ambala',
                'selaiyur', ' Agra', 'Silchar', 'Ajmer', 'Aligarh', ' Jaipur',
                'Jamshedpur', ' Singhmore', 'Darjeeling', 'Dharam singh Colony',
                ' HP', 'Hubli', ' RTO', 'Jalgaon', 'Jabalpur', ' Golden Enclave',
                'Palghar', ' South Bangalore', 'Opp Nagarjuna School', 'Kota',
                'Noida', 'Jodhpur', ' kokar', ' Manimangalam', ' Jamnagar',
                'Dhule', 'Cuddalore', ' Udupi', 'Akola', 'Mohali', 'Gaya',
                ' Nainital', 'Porbandar', 'Telangana', 'Guntur',
                'Nadiad-MahemdabadRoad', ' Fursungi', 'Vellore', 'Siwan', ' Porur',
                'Gwalior', ''], dtype=object)
```

```
In [7]: a["A"].value_counts()
```

```
Out[7]: Zirakpur          563
        Whitefield       230
        Raj Nagar Extension 215
        Thane West       165
        Kolshet Road     153
        ...
        Indramani Nagar   1
        Chirle            1
        T K Reddy Layout  1
        Professors Colony 1
        E3-108            1
        Name: A, Length: 5884, dtype: int64
```

```
In [8]: a["B"].value_counts()
```

```
Out[8]: Bangalore        4319
        Lalitpur          2987
        Mumbai            2020
        Pune              1984
        Noida             1765
        ...
        ELECTRICITY COLONY 1
        Chhindwara         1
        Jivarajpark        1
        opp To Nagarjuna Sch 1
        Lake View Recidency 1
        Name: B, Length: 433, dtype: int64
```

```
In [9]: a["C"].value_counts()
        #a["C"].nunique()
        #a["C"].isnull().sum()
```

```
Out[9]: Chennai          20
        Bangalore         16
        Kolkata           10
        Nagpur             6
        Lalitpur           5
        ..
        Nainital           1
        Pethapur Crossing  1
        Varanasi           1
        Kochi              1
        1
        Name: C, Length: 105, dtype: int64
```

```
In [10]: a["D"].value_counts()
```

```
Out[10]: Bangalore      5
Pune                    3
Chennai                 2
Warangal                 2
Jaipur                  2
Ranchi                  2
Gandhinagar             1
Narwana.                1
Nadiad                  1
Nainital                 1
Udupi                   1
Jamnagar                 1
                        1
Police Colony           1
Baddi                   1
Agra                    1
Coimbatore              1
chennai                 1
Durg                    1
Raipur                  1
Ambattur Taluk          1
nh-8                    1
Sindhudurg              1
Nagpur                  1
Lalitpur                1
Vapi                    1
Name: D, dtype: int64
```

```
In [11]: a["E"].value_counts()
```

```
Out[11]: Chennai        2
Gandhinagar             1
Vapi                    1
Jind                    1
Mumbai                  1
Mohali                  1
Name: E, dtype: int64
```

```
In [12]: a["F"].value_counts()
```

```
Out[12]: Vapi           1
Name: F, dtype: int64
```

```
In [13]: a["ADDRESS"]=a["ADDRESS"].str.split(",").str.get(1)
a
```

Out[13]:

LONGITUDE	LATITUDE	TARGET(PRICE_IN_LACS)	A	B	C	D	E	
12.969910	77.597960	55.0	Ksfc Layout	Bangalore	None	None	None	Non
12.274538	76.644605	51.0	Vishweshwara Nagar	Mysore	None	None	None	Non
12.778033	77.632191	43.0	Jigani	Bangalore	None	None	None	Non
28.642300	77.344500	62.5	Sector-1 Vaishali	Ghaziabad	None	None	None	Non
22.592200	88.484911	60.5	New Town	Kolkata	None	None	None	Non
...	...	...	...	...	...	...	...	.
27.140626	78.043277	45.0	Shamshabad Road	Agra	None	None	None	Non
39.945409	-86.150721	16.0	E3-108	Lake View Recidency		Vapi	None	Non
26.928785	75.828002	27.1	Ajmer Road	Jaipur	None	None	None	Non
12.900150	80.227910	67.0	Sholinganallur	Chennai	None	None	None	Non
26.832353	75.841749	27.8	Jagatpura	Jaipur	None	None	None	Non

```
In [14]: a["C"].unique()
```

Out[14]: array([None, 'Bangalore', ' Pethapur Crossing', 'Chennai', 'Nagpur', 'Ranchi', 'Goa', 'Kolkata', ' Coimbatore District', 'Mumbai', 'Jaipur', ' Santacruz East', 'Gandhinagar', 'Kochi', 'Pune', ' Before Maruti Automotive', 'Asansol', 'Palwal', 'Surat', 'Raipur', ' Tal- Malvan', 'Bharuch', 'Vadodara', 'Shimla', 'Nellore', 'Haldwani', 'Karjat', 'Ongole', 'Lalitpur', 'Lucknow', 'Secunderabad', ' Dighi', 'Karad', ' Gokul Vihar Society', 'Gurdaspur', 'Srikakulam', 'Indore', ' Manjari', 'Maharashtra', ' Ckikkakamma halli', 'Dehradun', 'Jamnagar', 'Raigad', 'Agra', 'Yavatmal', ' Kathirvedu Village', 'Vijayawada', 'Rajkot', 'Warangal', 'phase', 'Morbi', 'Ghaziabad', 'Varanasi', 'Madurai', 'Nainital', 'Bhavnagar', 'Rewa', 'Sanganer', ' Electronic City', ' Mayu', 'Korba', ' Narashima Sw', 'Dalhousie', 'Ambala', 'selaiyur', ' Agra', 'Silchar', 'Ajmer', 'Aligarh', ' Jaipur', 'Jamshedpur', ' Singhmore', 'Darjeeling', 'Dharam singh Colony', ' HP', 'Hubli', ' RTO', 'Jalgaon', 'Jabalpur', ' Golden Enclave', 'Palghar', ' South Bangalore', 'Opp Nagarjuna School', 'Kota', 'Noida', 'Jodhpur', ' kokar', ' Manimangalam', ' Jamnagar', 'Dhule', 'Cuddalore', ' Udupi', 'Akola', 'Mohali', 'Gaya', ' Nainital', 'Porbandar', 'Telangana', 'Guntur', 'Nadiad-MahemdabadRoad', ' Fursungi', 'Vellore', 'Siwan', ' Porur', 'Gwalior', ''], dtype=object)

```
In [15]: a["ADDRESS"].unique()
```

```
Out[15]: array(['Bangalore', 'Mysore', 'Ghaziabad', 'Kolkata', 'Kochi', 'Jaipur',
'Mohali', 'Chennai', 'Siliguri', 'Noida', 'Raigad', 'Bhubaneswar',
'Wardha', 'Pune', 'Mumbai', 'Nagpur', 'Deoghar', 'Bhiwadi',
'Faridabad', 'Lalitpur', 'Maharashtra', 'Vadodara',
'Visakhapatnam', 'Vapi', 'Mangalore', 'Aurangabad', 'Ottapalam',
'Vijayawada', 'Belgaum', 'Bhopal', 'Lucknow', 'Kanpur',
'Gandhinagar', 'Pondicherry', 'Agra', 'Ranchi', 'Gurgaon', 'Udupi',
'Indore', 'Jodhpur', 'Coimbatore', 'Valsad', 'Palghar', 'Surat',
'Varanasi', 'Guwahati', 'Amravati', 'Anand', 'Tirupati',
'Secunderabad', 'Raipur', 'Vizianagaram', 'Thrissur', 'Satna',
'Madurai', 'Chandigarh', 'Shimla', 'Gwalior', 'Rajkot', 'Sonipat',
'Allahabad', 'Berhampur', 'C V Raman Nagar', ' Mahalaxmi 2',
'Roorkee', 'Dharuhera', 'Latur', 'Durgapur', 'Panchkula',
'Solapur', 'Durg', 'Goa', 'Jamshedpur', 'Hazaribagh', 'Jabalpur',
'Hosur', 'Morbi', 'Hubli', 'Karnal', 'Patna', 'Bilaspur',
'Ratnagiri', 'Meerut', 'Kotdwara', 'Jalandhar', 'Amritsar',
'Patiala', 'Ludhiana', 'Alwar', 'Kota', 'Panaji', ' Thiruvannamiyur',
'Kolhapur', 'Ernakulam', 'Bhavnagar', 'Bharuch', 'Asansol',
'Jhansi', 'Margao', 'Anantapur', 'Eluru', 'Bhilai', 'Dehradun',
'Guntur', 'Jalgaon', 'Udaipur', 'Gurdaspur', 'Neemrana', 'Hassan',
'Sindhudurg', ' Manewada', 'Hoshangabad', 'Kottayam', 'ranchi',
'Dhanbad', ' Marcela', 'Navsari', 'Bahadurgarh', 'Nellore',
'next to tata chrome', 'Dhule', 'Tirunelveli', 'Cuttack',
'Haridwar', 'Nainital', ' Barwaritala', 'Jamnagar', ' Kalapatti',
' panvel', 'Kanchipuram', 'Kadi', 'Karad', 'Jagdalpur',
' Saidapet', 'Panipat', 'Muzaffarpur', ' Sirsi Bhankrota Road',
'Salem', 'Jhunjhunu', 'Gandhidham', 'Junagadh', 'Moradabad',
'Pallikrnanai', 'Ahmednagar', ' barwaritola', 'Jalna', 'Bhiwani',
'Palakkad', 'Kannur', 'Vakola', 'Karjat', 'Akola', 'Jind',
' GANDHINAGAR', ' Bellandur', 'Gaya', 'Ambala', 'Ajmer', ' kochi',
'ZAGADE WASTI', 'Hajipur', ' Kamptee Road', 'Dharwad',
'Pudukkottai', 'Kollam', 'Ooty', 'Bhandara', ' Police Lane',
'Barabanki', ' Pratap Nagar', ' Periyar Nagar', 'Rajpura',
'Palwal', 'Aligarh', 'Avadi', 'Erode', ' nanganallur', 'Rudrapur',
'Tenali', 'Ongole', ' near ram lila maidan', 'Nizamabad', 'Puri',
'Dalhousie', 'Siddipet', 'Solan', 'Darbhanga',
' Opp- JAINAM VIHAR', ' Achara', 'Kadapa', 'Kakinada', ' Ponda',
' opposite Dudhdhara Dairy', ' Manapakkam', 'Agartala',
' Vadodara',
' Official Residence of Chief Minister of Himachal Pradesh',
' NELLORE', 'Warangal', 'Near Uttar Ujala press', 'Osmanabad', '',
'Bhagalpur', ' Old Pardi Naka', 'Bardhaman', 'Rishikesh',
'Chandrapur', 'Bokaro', 'akshaya Towers', ' chembur west',
' Gomti Nagar', 'Jharsuguda', 'Bhimavaram', 'Kurnool', 'Amroha',
'Hapur', 'Sabarkantha', 'mylapore', 'Harda', 'Haldwani',
'kundrathur', 'Ujjain', 'Thoothukudi', ' Nagaram', 'Thiruvannamiyur',
'Karaikudi', ' Near Sai Mandir', ' Near Talathi office',
' Tata Hospital', 'Mathura', ' Kuthumbakam', 'Gadhinglaj',
'yamuna Complex', ' karad', ' Tibri Road', 'Rewari', 'Godhra',
'Kharagpur', ' Near Alluri Seetharamaraju Statue', 'Srinagar',
'Manoramaganj', 'Midnapore', ' Asansol', ' Pune Solapur Highway',
' Tardeo', 'Rayagada', 'Banswara', 'Shirdi', ' Eagle Ridge',
' GMS Road', ' Samarpan Square', 'karjat', 'Rohtak', 'Pali',
'Hathras', ' Sikandara', ' Yash plaza', ' Vinayagapuram',
```

```
' Motera', 'Balasore', ' Poonamallee', ' ELECTRICITY COLONY',
'Chhindwara', 'Jivarajpark', 'Bareilly', 'opp To Nagarjuna Sch',
'Patan Road', 'nandi Garden', 'Vidisha', 'umiyanagar2',
'Thanjavur', 'Kangra', 'Bikaner', ' Waghapur', 'Rewa', ' Neral',
' Ghaziabad', ' Near Bhu', 'Porbandar', 'Nagaur', 'Nanded',
'Rourkela', 'Nadiad', ' Uttarahalli', ' S.S.Colony',
' Sarjapura Road', ' Bangalore', 'Gulbarga', ' Ramgarh',
' NR - RAMESHVAR BUS STOP', ' BHAVNAGAR', ' E.M Bypass',
'Palanpur', 'Bhadrak', 'Kurukshetra', 'boda bag', 'jamnagar road',
' Athwalines', ' Electronic city', ' Manikantan Nagar', ' IT Park',
'Dibrugarh', 'Sagar', 'Machilipatnam', ' Near Sanjay Place',
'Pathanamthitta', ' besa', ' Electronic city phase 1',
' Electronics City Phase 1', 'LATMA ROAD NO - 9',
' Behind Nar Narayan Mandir', 'Bankura', 'Jammu', 'Idukki',
' Genda Circle', ' Near District Hospital Korba', 'vasant Vihar',
' Begur Hobli Road', ' Portryne Mall Road', ' Dombivali East',
'Ambala City', 'Camp Road', 'Raigarh', ' Chunabhati',
' Near Halwai ki Bagichi', ' TC Playa Main Road',
' NEAR SADARGHAT BRIDGE', 'Arrah', 'Nagaon', 'Talaja Road',
'Karwar', 'Dahod', ' Opposite GRP Ground', 'Nagapattinam',
' Ambattur', ' Kanpur Road', 'Sikar', ' Aligarh',
' Vaishali Nagar West', ' gomti nagar', 'ambika township',
' Narayan Pur', ' KAGGADASAPURA MAIN ROAD', 'Angul', 'Srikakulam',
' Sreebhumi', 'Baddi', ' Jugsalai', ' Madipakkam', ' Sanganer',
'Latma road', ' KURSEONG', ' Near Salua Bazar', ' Kalyan Wes',
' chinchwad', 'Raisen', ' Machabollaram', ' Gali No 2',
' RR Nagar', 'Hoshiarpur', ' Solan ', 'Beed', ' Beltarodi Road',
' Amroli', 'lekhranj metro station', ' haudin road', ' Sullad Road',
' Korattur', ' Kusugal road', ' A C Market',
' Near Kasar Managal Bhavan', ' Bellandur Post', ' Lohgarh Road',
'Gadarwara', ' Siddhivinayak Nagar', ' Mova',
' Behala- Tollygunge', ' JP Nagar', 'deshaiphet Road ',
' Ranjit Sagar Road', ' Pune', ' Kota', ' Dunlop',
' greater noida west', ' near cheshire home road', 'Jajpur',
'Govindpuram', ' Varadharajapuram Village', ' Palghar 401202',
' Anand Colony', ' Syndicate Bank Layout', ' Nagasandra Post',
'Haldia', 'Chittoor', 'Faizabad', 'Budha more', ' Prabgat Nagar',
'Malappuram', 'Betul', 'Surendranagar', 'Phagwara', 'Visnagar',
'Rajnandgaon', ' pudupalayam', 'Raichur', ' Narayanapuram',
' Kukkikatte', ' Near RTO', ' DERABASSI', 'Chankyapuri',
' opp chopati', 'Sarfabad Near Sundar Farm House', 'khammam Dist',
'Sambalpur', ' Mallikarjunapuram colony', 'Opp.Mafatlal Mill',
' Gogol', 'Gondia', ' Ghodbunder Road', ' Bhekrainagar',
' Wagdara', ' Tembhode Rd', 'Chak Getor', ' Velapadi Kosapet',
'Bharatpur', 'Bhuji', 'Pin 841407', ' Ramapuram', 'Washim',
' Behind Saidapet Court', ' near maharaja bada', 'medavakkam',
' Lake View Recidency'], dtype=object)
```

In [ ]:

In [ ]:

