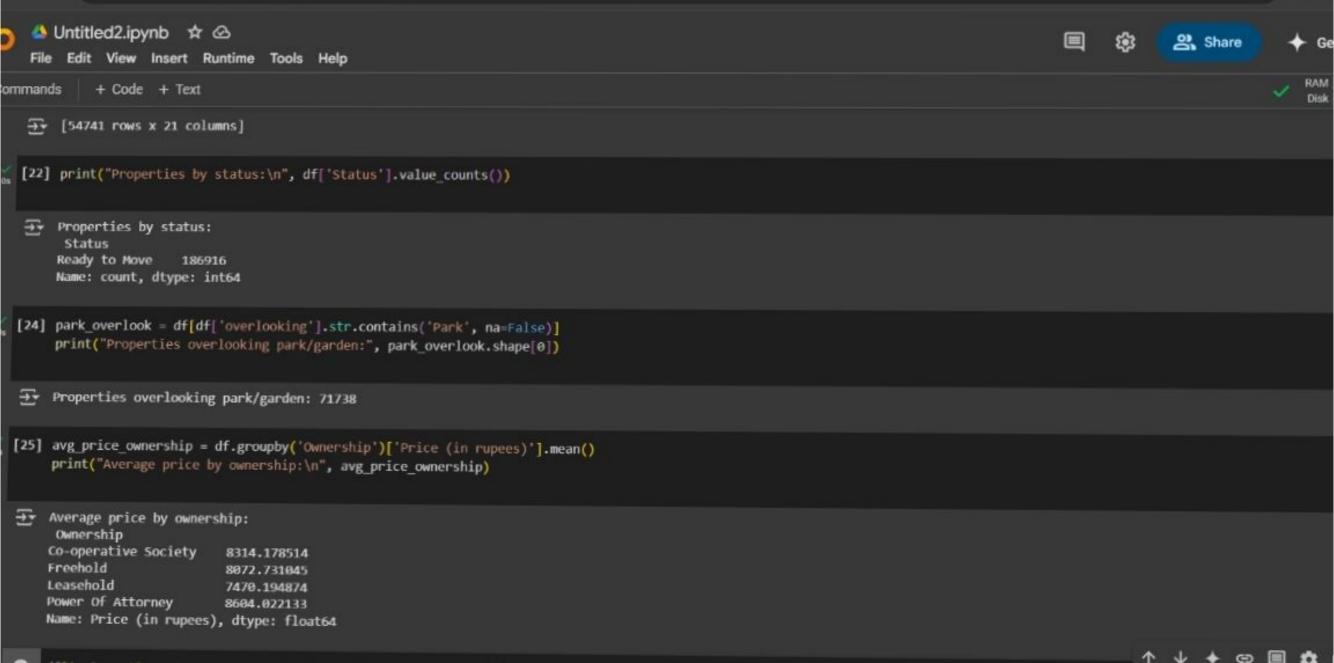
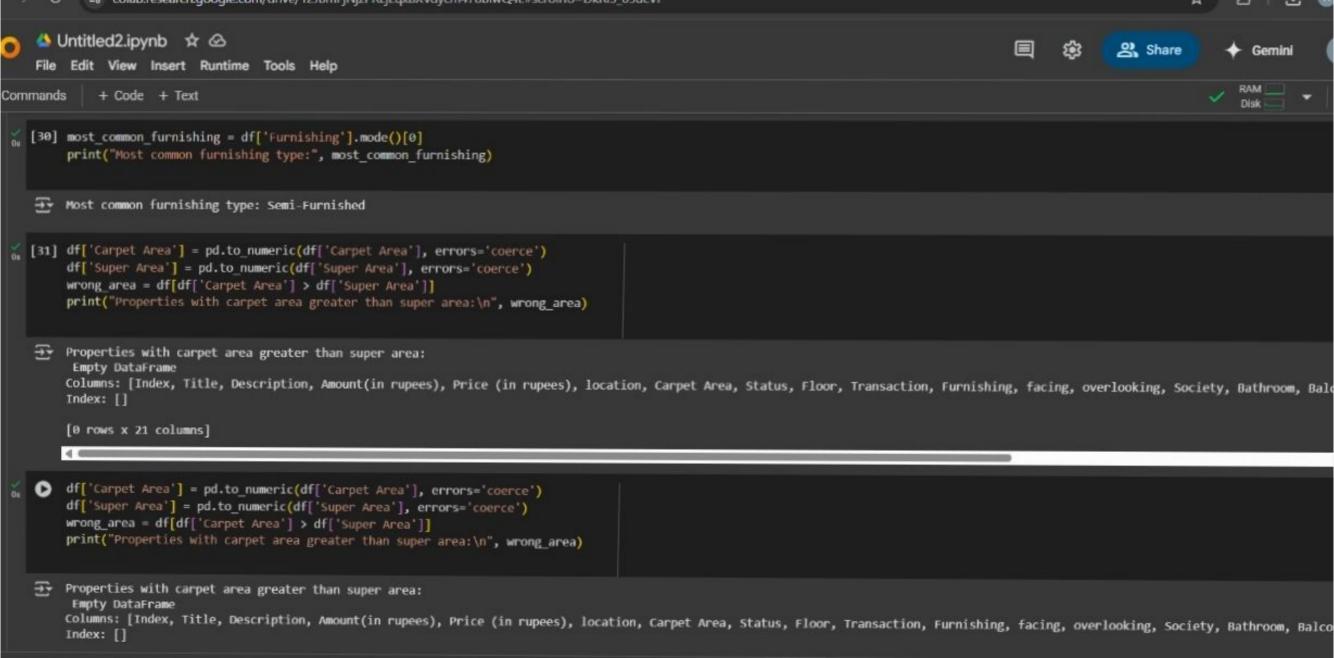
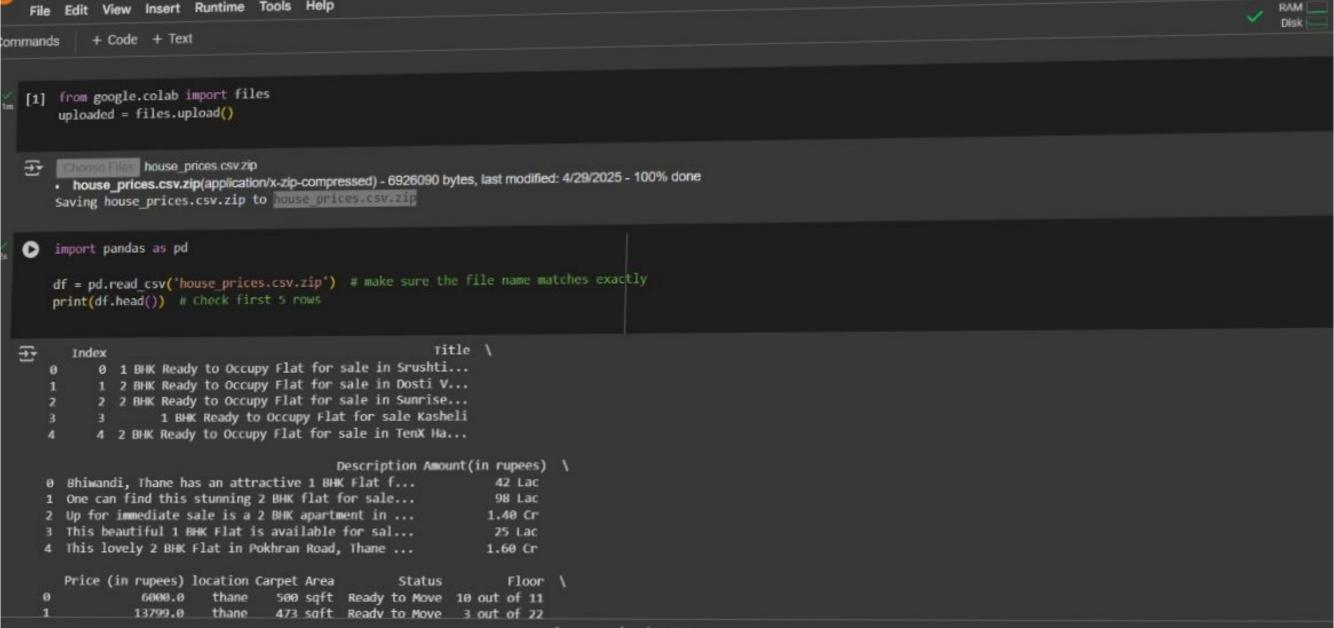
NAME: Alok Kadtan DIV: CS6 PRN: 202401080034 **ROLL NO. : CS6-68** BATCH: CS63 topic:house price



```
mands
         + Code + Text
                TenX Habitat Raymond Realty
                                                             1 Covered
                   Ownership Super Area Dimensions Plot Area
                                   NaN
                                              NaN
                                                         NaN
                   Freehold
                                              NaN
                                                         NaN
                   Freehold
                                              NaN
                                                         NaN
                                              NaN
                                                         NaN
     4 Co-operative Society
                                   NaN
                                              NaN
                                                         NaN
     [5 rows x 21 columns]
     import zipfile
     with zipfile.ZipFile('house prices.csv.zip', 'r') as zip ref:
         zip_ref.extractall()
[6] import pandas as pd
     # Load the data
     df = pd.read_csv('/content/house_prices.csv') # Adjust path if needed
     df.columns = df.columns.str.strip() # Clean spaces in column names
     print("Total properties listed:", df.shape[0])
     Total properties listed: 187531
```





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ommands
       df['Balcony'] = pd.to_numeric(df['Balcony'], errors='coerce')
        df['Balcony'] = pd.to numeric(df['Balcony'], errors='coerce')
        # Then filter
        more balcony = df[df['Balcony'] > 2]
        print("Properties with more than 2 balconies:\n", more balcony)
               Up for immediate sale is a 3 BHK apartment in ...
                                                                           80 Lac
                This magnificent 5 BHK Flat is available for s...
        187523
                                                                          1.19 Cr
                This magnificent 3 BHK Flat is available for s...
                                                                          63 Lac
               This exquisite 3 BHK Flat is offered for sale ...
                                                                          1.18 Cr
                Price (in rupees) location Carpet Area
                                                               Status
                                                                             Floor \
                          14344.0
                                     thane
                                              925 sqft Ready to Move
                                                                       8 out of 20
         28
                           9643.0
                                              440 sqft Ready to Move
         34
                                     thane
                                                                        2 out of 7
                           3768.0
                                                   NaN Ready to Move
                                                                        5 out of 7
                                     thane
         39
                           4070.0
                                     thane
                                              600 sqft Ready to Move
                                                                        2 out of 7
         54
                          11905.0
                                      thane
                                              636 sqft Ready to Move 10 out of 10
         187521
                           5816.0 zirakpur
                                                   NaN Ready to Move
                                                                      2 out of 11
                                             1200 sqft Ready to Move
         187522
                           4040.0 zirakpur
                                                                        3 out of 3
         187523
                           4547.0 zirakpur
                                             1705 sqft Ready to Move 5 out of 10
         187526
                           3225.0 zirakpur
                                                   NaN Ready to Move
                                                                      2 out of 4
         187530
                           6162.0 zirakpur
                                                   NaN Ready to Move 5 out of 13
                  Transaction ...
                                         facing
                                                                overlooking \
                      Resale ...
         28
                                          East
                                                                Garden/Park
         34
                      Resale ...
                                          East
                                                                Garden/Park
```

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mmands
 [12] ready_to_move = df[df['Status'] == 'Ready to move']
      print("Ready to move properties:", ready_to_move.shape[0])
  Free Ready to move properties: 0
 [13] new_transaction = df[df['Transaction'] == 'New Property']
       print("New transaction properties:", new transaction.shape[0])
      New transaction properties: 42565
 [14] new transaction = df[df['Transaction'] == 'New Property']
       print("New transaction properties:", new transaction.shape[0])
      New transaction properties: 42565
       print("Top 5 locations:\n", df['location'].value_counts().head(5))

→ Top 5 locations:
        location
       new-delhi
                    27599
       bangalore
                    24030
       kolkata
                    22380
```

```
[34] resale properties = df[df['Transaction'] == 'Resale']
      print("Number of resale properties:", resale properties.shape[0])
 Number of resale properties: 144172
[ [35] df['Amount(in rupees)'] = pd.to numeric(df['Amount(in rupees)'], errors='coerce')
      ready avg amount = df[df['Status'] == 'Ready to move']['Amount(in rupees)'].mean()
      print("Average amount of Ready to Move properties:", ready avg amount)
 Average amount of Ready to Move properties: nan
[36] freehold count = df[df['Ownership'] == 'Freehold'].shape[0]
      print("Number of Freehold ownership properties:", freehold count)

→ Number of Freehold ownership properties: 112229
```

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commands
      [54741 rows x 21 columns]
  [22] print("Properties by status:\n", df['Status'].value_counts())
      Properties by status:
       Status
      Ready to Move
                      186916
      Name: count, dtype: int64
 [24] park_overlook = df[df['overlooking'].str.contains('Park', na=False)]
      print("Properties overlooking park/garden:", park_overlook.shape[0])
     Properties overlooking park/garden: 71738
     avg_price_ownership = df.groupby('Ownership')['Price (in rupees)'].mean()
     print("Average price by ownership:\n", avg_price_ownership)
    Average price by ownership:
     Ownership
    Co-operative Society
                           8314.178514
    Freehold
                           8072.731045
    Leasehold
                           7470.194874
    Power Of Attorney
                           8604.022133
    Name: Price (in rupees), dtype: float64
```







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Commands .

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east_facing = df[df['facing'] == 'East']

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187514 This lovely 3 BHK Flat in Gazipur, Zirakpur is... 187522 up for immediate sale is a 3 BHK apartment in ... 187526 This magnificent 3 BHK Flat is available for s...

> 63 Lac 80 Lac 65 Lac

			_	*4	overlooking \ Garden/Park	Garo		facing East	Transaction facing Resale East	1	
	of 3	1 out of 3	Move	to	Ready		1250	zirakpur	4343.0	187528	
	of 4	2 out	Move	8	Ready		NaN	zirakpur	3225.0	187526	
	of 3	3 out	Move	8	Ready		1200	zirakpur	4840.9	187522	
	of 4	1 out		B	Ready		1200	zirakpur	3939.0	187514	
	of 3	3 out of 3		8	Ready		950	zirakpur	3810.0	187512	
	:								:	:	
	of 27	18 out of 27	Ready to Move	8	Ready		1820	thane	17526.0	Ħ	
	of 27	3 out of 27	Move	đ	Ready		986	thane	11150.0	9	
	01 /	2 OUT OT /	Move	6	Ready			thane	6618.0	us	
	01 29	THE OUT		8	Ready		779	thane	17500.0	2	
	of 22	3 out of 22		8	Ready		473	thane	13799.0	1	
-	Floor			v			Carpet Area	location Carpet	Price (in rupees)		
	Lac	76 Lac			flat	3 BH	ealing	has an app	Gazipur, Zirakpur has an appealing 3 BHK flat	187528	

187514 New Property ...

East

East Garden/Park, Main Road

Garden/Park

187512

Resale ...

Resale Resale Resale

East

Garden/Park

East Garden/Park, Main Road East Garden/Park

Garden/Park

Resale

