

# Real Estate Data Analysis

**By Rajvinder Kaur**



- **Objective: Analyze real estate market trends for informed decision-making.**
- Collect and clean real estate data.
- Use DAX for complex calculations like year-over-year price changes.
- Design Power BI dashboards to display market trends, price distributions, etc.
- Analyze the distribution of house prices to understand market trends and identify potential investment opportunities.
- Explore the relationship between property square footage and prices

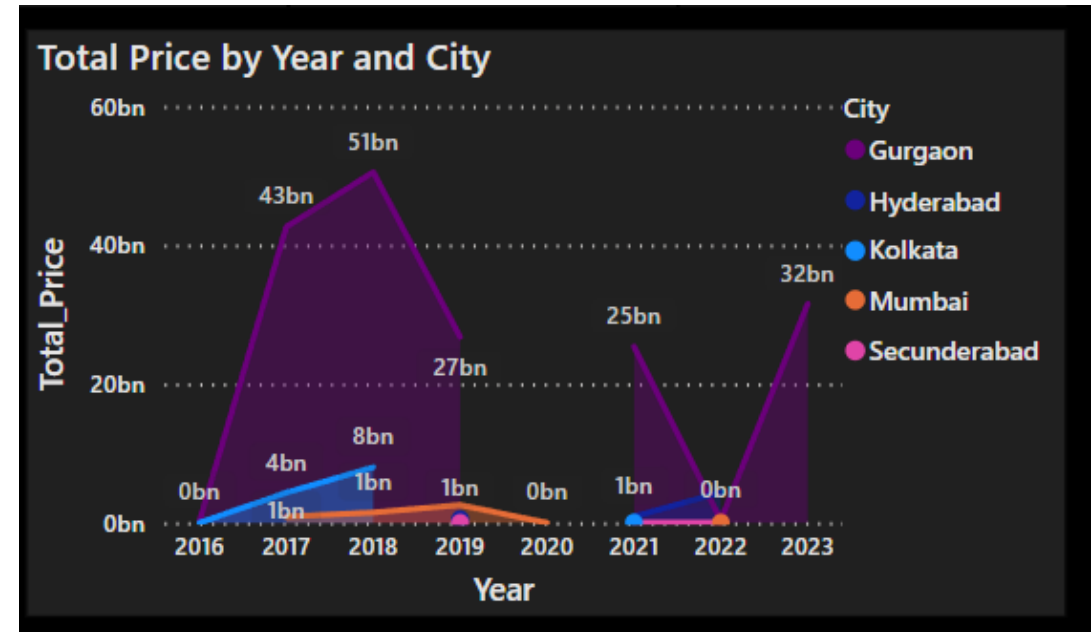
We have dataset for different cities using Power Query data transformation was done and data is appended into one table.

	Prop_ID	Property_Type	Building_Name	City	Ownership_Type	Furnished	Facing	Property_Age	Price_per_SQFT	Area_SQFT	Date	Bedroom_Num
	O70751676	Residential Apartment	Godrej Ascend	Mumbai	Freehold	Furnished	North	0-1 Year Old Property		381	2019-08-01	2
	A70185532	Residential Apartment	Godrej Ascend	Mumbai	Freehold	Furnished	North	0-1 Year Old Property		381	2019-07-30	3
	G70751602	Residential Apartment	Swaminarayan City	Mumbai	Freehold	Furnished	North	0-1 Year Old Property		403	2019-07-18	3
	H70989410	Residential Apartment	Alag Capital	Mumbai	Freehold	Furnished	North	0-1 Year Old Property		472	2018-04-02	2
	N70800494	Residential Apartment	Kalpataru Vivant	Mumbai	Freehold	Furnished	North	0-1 Year Old Property		424	2019-02-15	5
	O71011504	Residential Apartment	Bhagwati Elysia 2	Mumbai	Freehold	Furnished	North	0-1 Year Old Property		450	2019-02-23	1
	T70692210	Residential Apartment	Kalyan Nagari	Mumbai	Freehold	Furnished	North	0-1 Year Old Property		450	2019-06-08	5
	G70896990	Residential Apartment	127 Raj Homes	Mumbai	Freehold	Furnished	North	0-1 Year Old Property		449	2019-08-09	5
	J68388094	Residential Apartment	Ashar Axis	Mumbai	Freehold	Furnished	North	0-1 Year Old Property		462	2019-04-04	5
	D70677736	Residential Apartment	Ruparel Livia	Mumbai	Freehold	Furnished	North	0-1 Year Old Property		368	2019-07-06	4
	V68917428	Residential Apartment	The Icon by Risland	Mumbai	Freehold	Furnished	North	0-1 Year Old Property		449	2019-08-22	5
	V68915746	Residential Apartment	Mahavir Square	Mumbai	Freehold	Furnished	North	0-1 Year Old Property		427	2019-03-09	4
	B71015380	Residential Apartment	Aramus The Domus 26 West	Mumbai	Freehold	Furnished	North	0-1 Year Old Property		340	2019-05-14	3
	A70983070	Residential Apartment	Sai Proviso Atlantis	Mumbai	Freehold	Furnished	North	0-1 Year Old Property		322	2019-03-13	1
	Y70890618	Residential Apartment	Oyster Living Divino	Mumbai	Freehold	Furnished	North	0-1 Year Old Property		600	2019-03-29	2
	B70869098	Residential Apartment	Arihant 5 Anaika	Mumbai	Freehold	Furnished	North	0-1 Year Old Property	0-1 Year Old Property	391	2019-04-03	2
	V70773238	Residential Apartment	Crescent Silverwoods	Mumbai	Freehold	Furnished	North	0-1 Year Old Property		431	2019-03-20	5
	T70766060	Residential Apartment	Shraddha Apartments	Mumbai	Freehold	Furnished	North	0-1 Year Old Property		490	2019-08-17	2
	F70764190	Residential Apartment	Raunak City 3	Mumbai	Freehold	Furnished	North	0-1 Year Old Property		577	2019-02-09	2
	S68918318	Residential Apartment	Lodha Amara	Mumbai	Freehold	Furnished	North	0-1 Year Old Property		446	2019-04-19	2
	X70601672	Residential Apartment	Kanakia Silicon Valley	Mumbai	Freehold	Furnished	North	0-1 Year Old Property		429	2017-09-12	4
	H68229898	Residential Apartment	Godrej Horizon	Mumbai	Freehold	Furnished	North	0-1 Year Old Property		435	2019-05-10	5
	C70660928	Residential Apartment	Crescent Silverwoods	Mumbai	Freehold	Furnished	North	0-1 Year Old Property		431	2019-02-01	3
	P70962074	Residential Apartment	Rudraksha by Raj Realty	Mumbai	Freehold	Furnished	North	0-1 Year Old Property		443	2019-07-22	1
	Q70741920	Residential Apartment	Akshay Avneesh Imperium	Mumbai	Freehold	Furnished	North	0-1 Year Old Property		408	2019-05-10	5
	X70810558	Residential Apartment	JSB Nakshatra Aazstha	Mumbai	Freehold	Furnished	North	0-1 Year Old Property		306	2019-08-20	4
	G70988396	Residential Apartment	Shree Super Homez	Mumbai	Freehold	Furnished	North	0-1 Year Old Property		360	2019-01-04	2

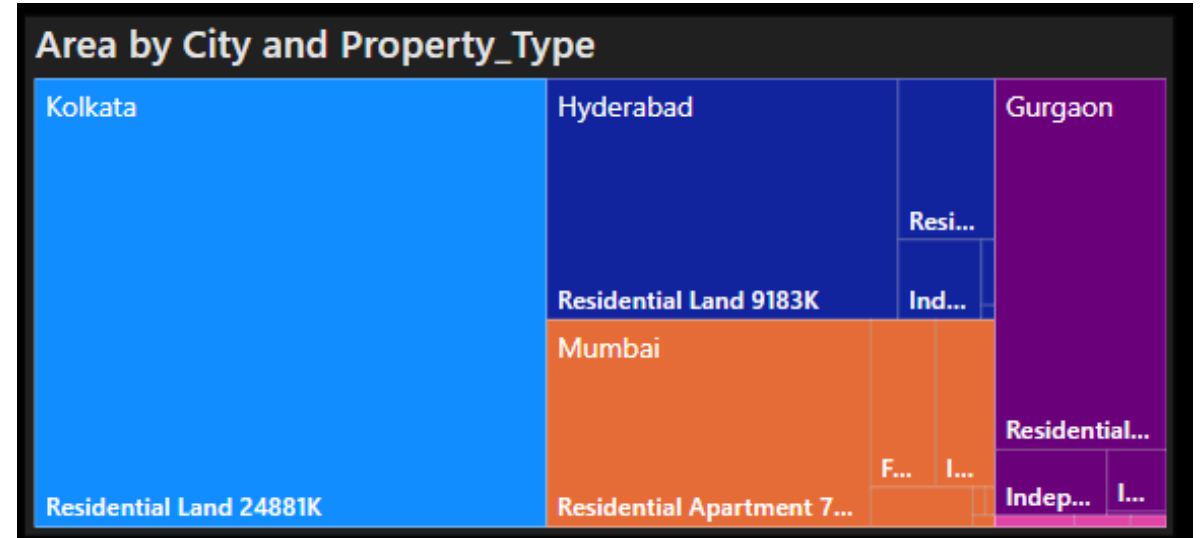
Table: HousePrices (20,242 rows)



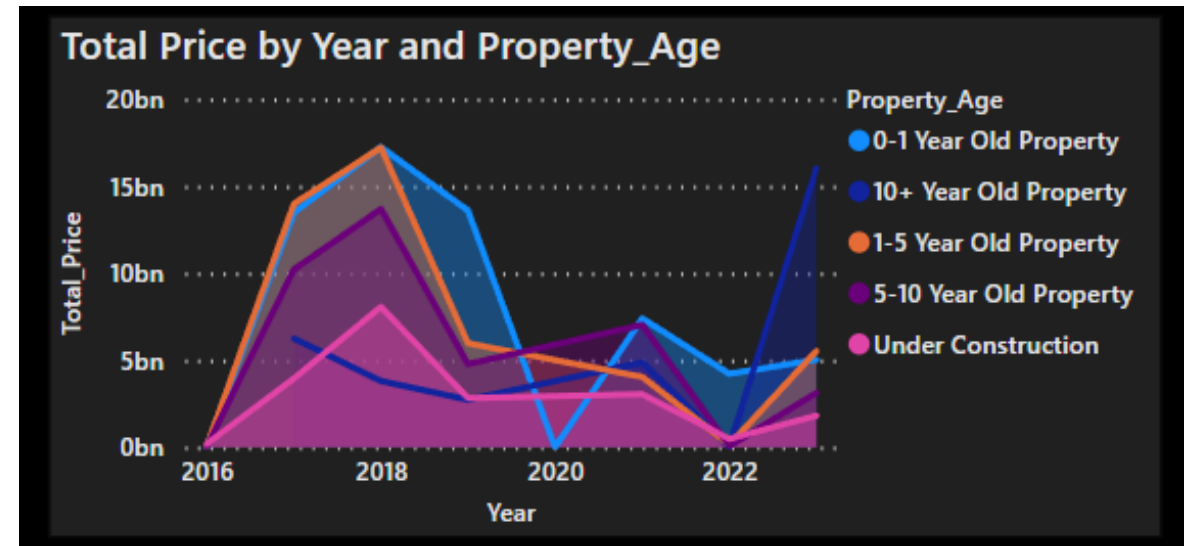
- Change in price in different city by year is shown.
- A lot of variation in price has been seen in Gurgaon whereas in other city price seems to be constant.



- Large area of land has been sold in Kolkata city.
- In Secundrabad least selling was accounted.

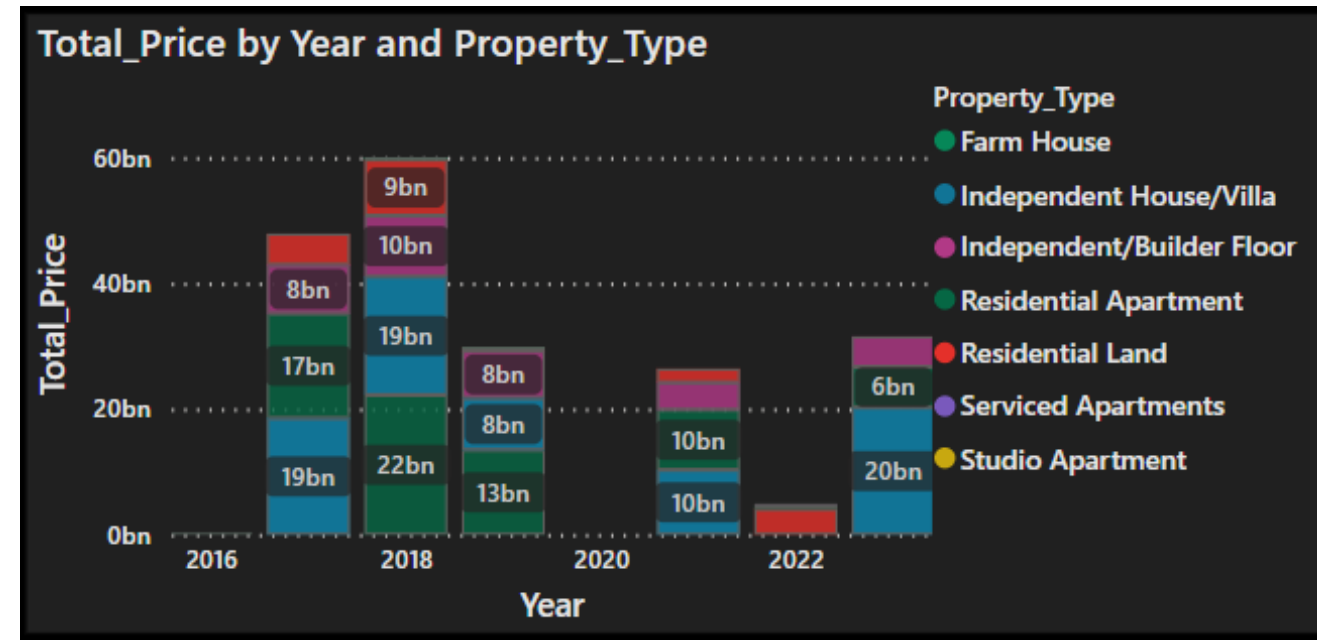


- In the year 2020 and 2022 a sudden dip was seen after that price of property increased drastically.
- From 0-5 Years old property price was changed significantly.
- A drastic change in price of 10 Years old property was noticed in 2023.



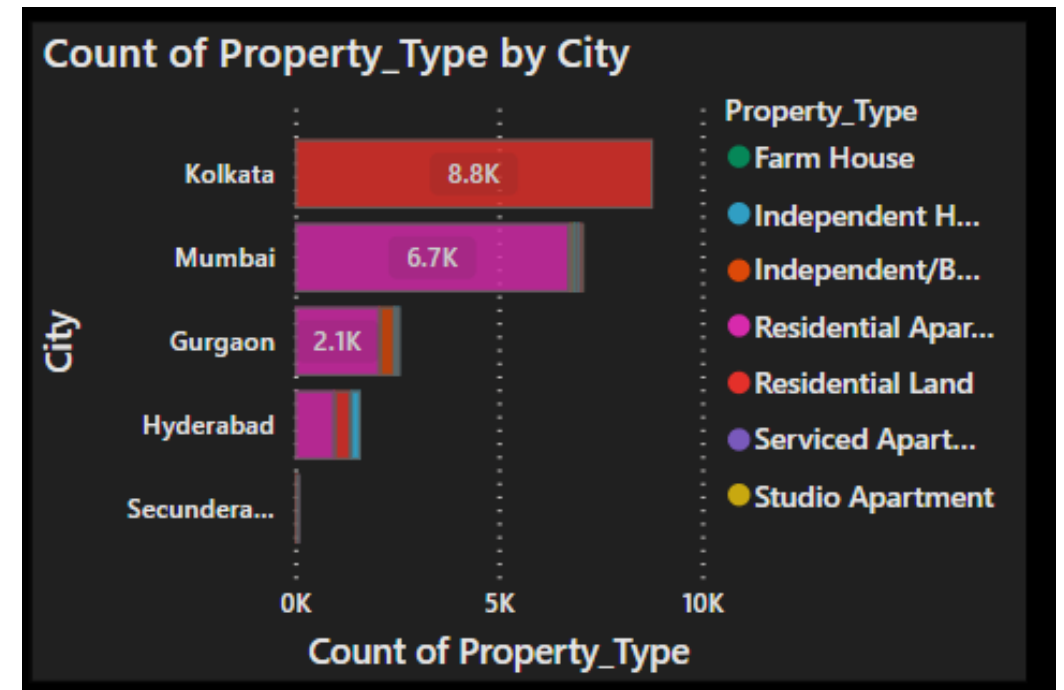


- In the year 2018, Farm House contributed mostly in the real estate selling price.
- There was no sale in year 2020. In Year 2022 farm house and residential land was sold.

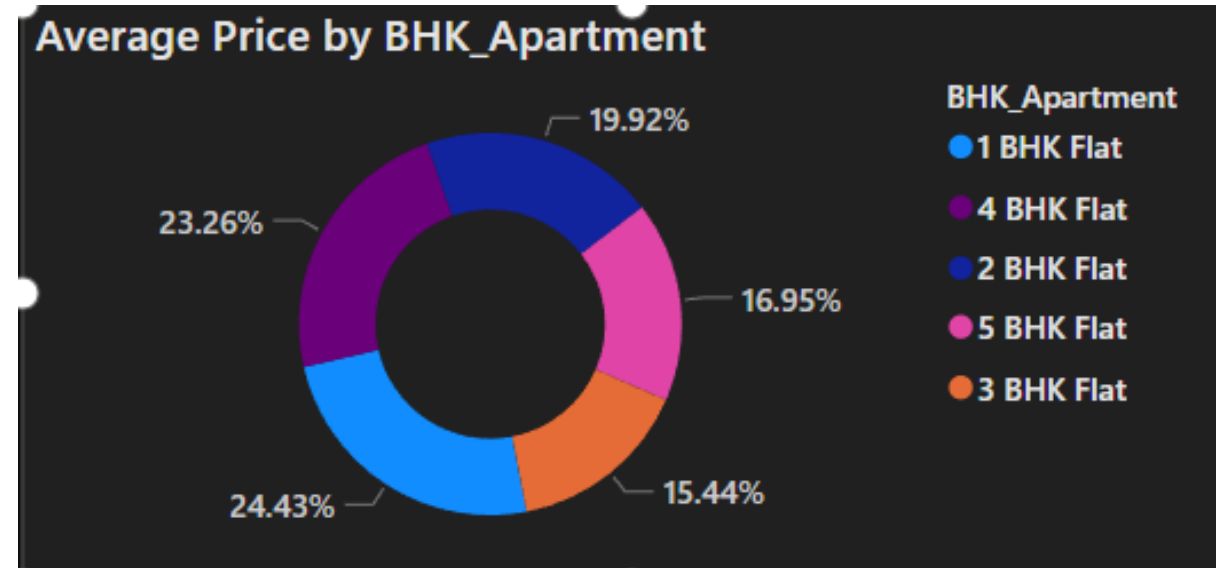




- Around 9000 sales of residential land were noticed in Kolkata.
- In Mumbai, Hyderabad, and Gurgaon residential apartment was sold mostly.



- Average price of 1BHK flat and 4 BHK flat is almost same.
- 5 BHK and 3BHK flat also sold in same price.
- 2 BHK flat's price was more than 5BHK flat but less than 4 BHK flat.





# Real Estate Dashboard



₹ 2.43bn

MTD Sales

₹ 31.55bn

QTD Sales

₹ 31.55bn

YTD Sales

₹ 201,057,060,089.00

PTD Sales

₹ 8.50M

Moving\_Average\_100Days

18.61%

YoY Growth

Overview

Details

Summary

Year

All

Quarter

All

Month

All

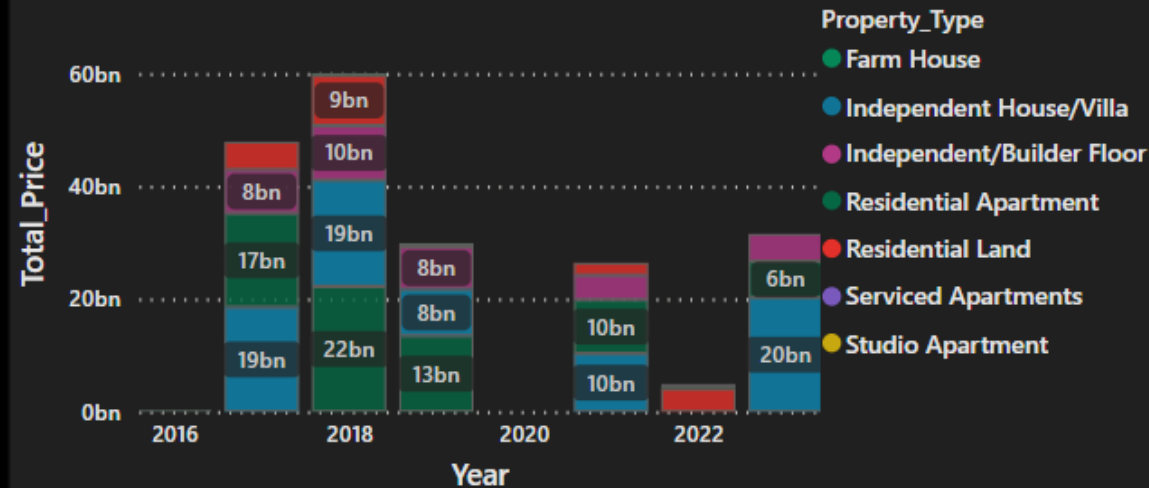
Day

All

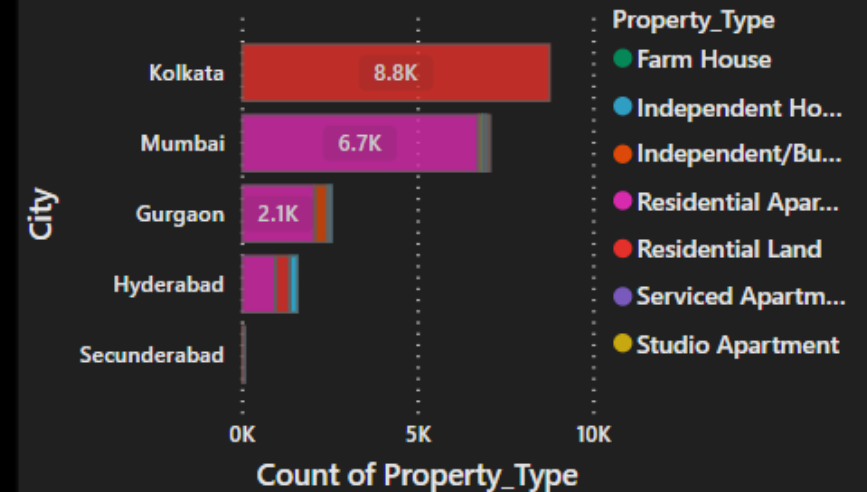
City

All

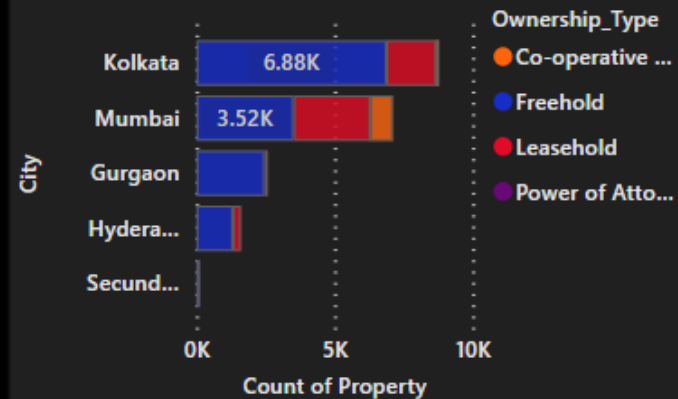
## Total\_Price by Year and Property\_Type



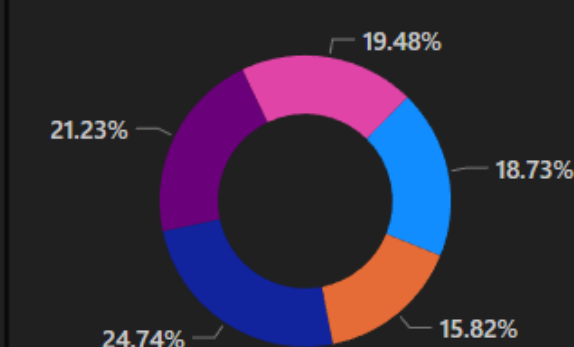
## Count of Property\_Type by City



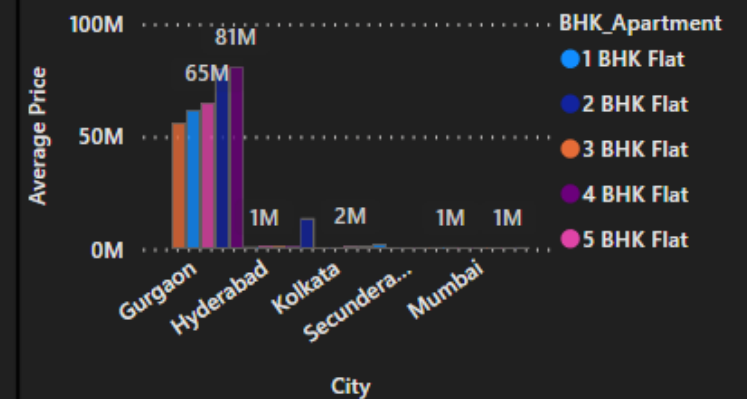
## Property sold by City and Ownership\_Type



## Average Price by BHK\_Apartment



## Average Price by City and BHK\_Apartment





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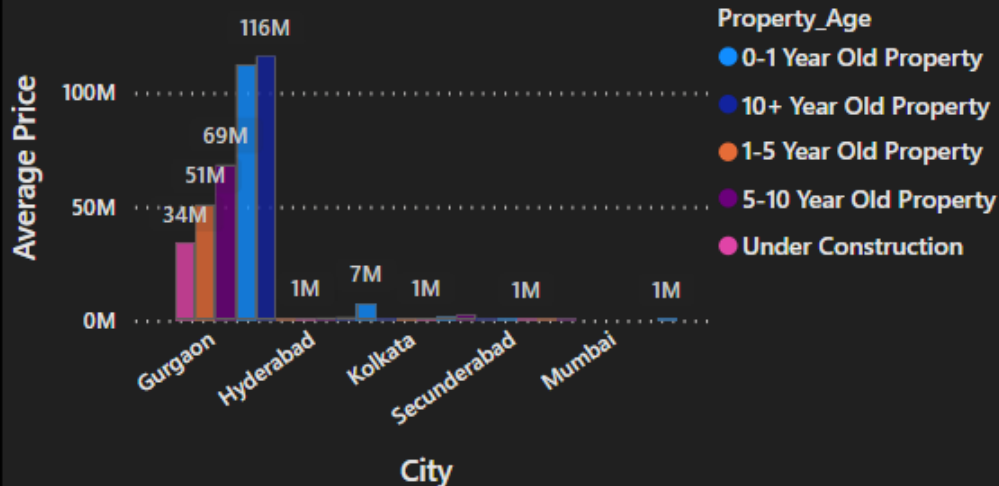
Day

All

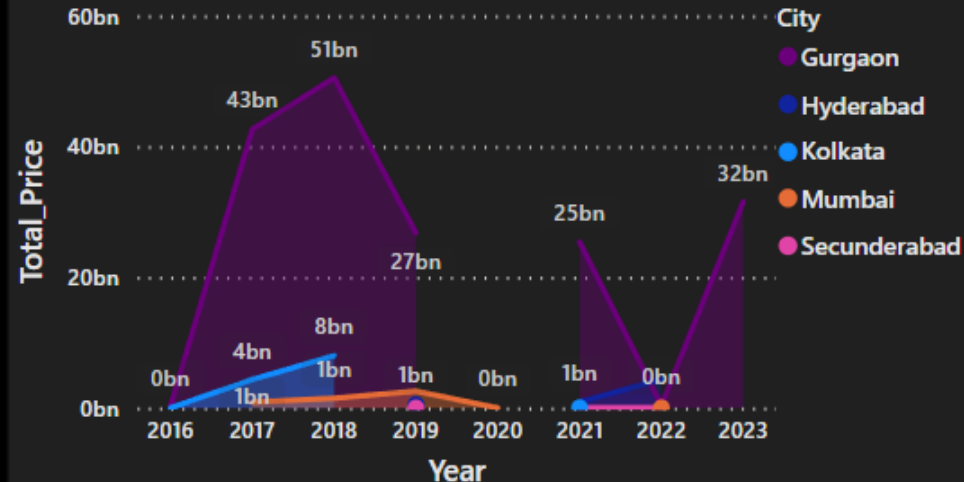
City

All

Average Price by City and Property Age



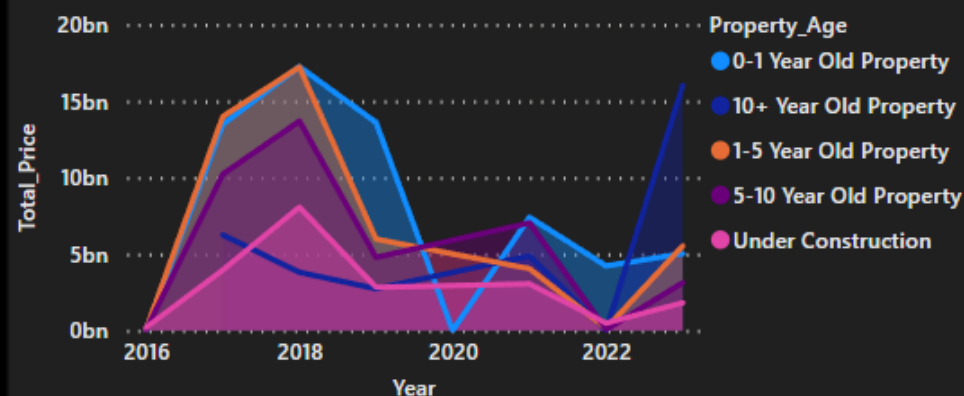
Total Price by Year and City



Area by City and Property\_Type



Total Price by Year and Property\_Age





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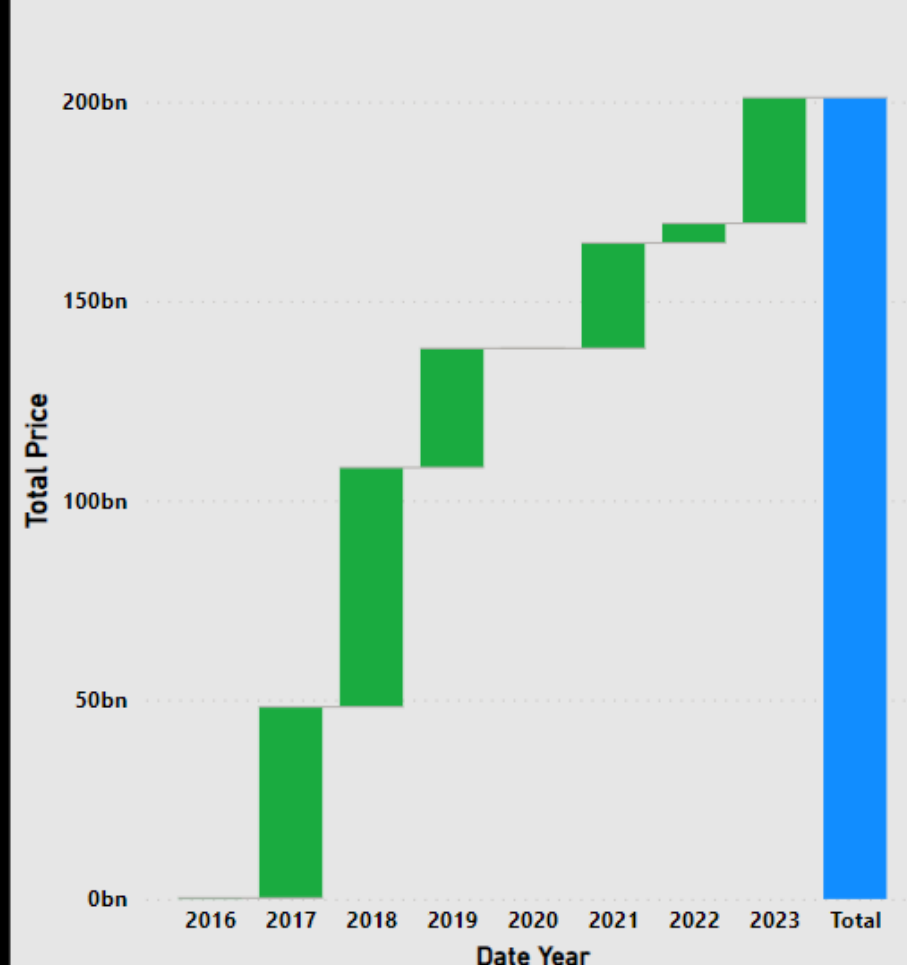
City

All

## Price by city and Apartment

Year	City	BHK_Apartment	Property_Age	Sum of Total_Price
2017	Gurgaon	1 BHK Flat	0-1 Year Old Property	1572856309
2018	Gurgaon	1 BHK Flat	0-1 Year Old Property	2651742066
2019	Gurgaon	1 BHK Flat	0-1 Year Old Property	2117864634
2021	Gurgaon	1 BHK Flat	0-1 Year Old Property	244570128
2022	Gurgaon	1 BHK Flat	0-1 Year Old Property	345000
2023	Gurgaon	1 BHK Flat	0-1 Year Old Property	740182488
2017	Gurgaon	1 BHK Flat	10+ Year Old Property	665970958
2018	Gurgaon	1 BHK Flat	10+ Year Old Property	660804480
2019	Gurgaon	1 BHK Flat	10+ Year Old Property	934751355
2021	Gurgaon	1 BHK Flat	10+ Year Old Property	3336158658
2023	Gurgaon	1 BHK Flat	10+ Year Old Property	324183903
2017	Gurgaon	1 BHK Flat	1-5 Year Old Property	2117060008
2018	Gurgaon	1 BHK Flat	1-5 Year Old Property	3215562591
2019	Gurgaon	1 BHK Flat	1-5 Year Old Property	663074483
2021	Gurgaon	1 BHK Flat	1-5 Year Old Property	1354114864
2022	Gurgaon	1 BHK Flat	1-5 Year Old Property	10264802
2023	Gurgaon	1 BHK Flat	1-5 Year Old Property	659928331
2017	Gurgaon	1 BHK Flat	5-10 Year Old Property	2119504576
Total				201057060089

## Total Price by Year



# Outcomes

- Company should work on marketing strategies in Kolkata, Mumbai and Hyderabad.
- In 2019 and 2021 company noticed a sudden drop in sales, company could implement marketing strategies which were implemented in 2023.
- Company should work on old properties and properties under construction to increase its sale.
- Service apartments, studio apartments and residential apartments should be on some offer which could increase its sale.
- By giving some offer company could encourage people to buy farm house, and independent house.
- 3 BHK flat has least contribution in sale, which could be increased by improving some marketing strategies.





Thank You

