Quetion 1 :-

Part_1:-

- **A data of houses with their prices have been provided to you.Please help us to udersatnd the data more clearly.**

1. **Read the file *h_data.csv* with appropriate code line.**
2. **Please provide us information about how much data you recevied**
3. **Let us know some top values as well as some bottom values from the table**
4. **To get a first glance of a data we want to know names of columns present in the data,with their data types and count of non-null values for each column as well. Can you please provide this in at one place ?**

Part_2:-

- **Time to explore some more intresting facts**

> As a customer We wish to know Following distributions of houses -

- **How the houses are distributed amoung the different different roads Eg – How many houses are present on pave street similarly on other strees as well**
- **Count of all houses with different Housestyles available**
- **We want to know how many houses are there, where Central Air conditioners installed and viceversa**

> We are intrested to Know all the houses those have sale price at least $ 500,000

> Can you prvoide us all the houses which were build after year 2000

> And It will be greate if provide us all the houses which were build after year 2001 ,which have attached Garage with it and the house shoud be near OldTown

Part_3:-

- **To make data more explainable we want to rename some column names -**
  Rename BedroomAbvGr with Bedroom
  Rename Neighborhood with NeighborArea

- **For future purpose Add new column to the dataframe with "Sold" with current default value as 'N'**

- **We have realised that this table has missed two entiers .And we now we want to add them in the existing table .Please add follwing information to your dataframe -**

```
data_to_add = {          'LotArea': [9500, 15000],
        'Steet': ['Pave', 'Gravel'],
        'Neighborhood': ['Downtown', 'Downtown'],
        'HouseStyle': ['2Story', '1Story'],
        'YearBuilt': [2021, 2019],
        'CentralAir': ['Y', 'N'],
        'Bedroom': [5, 4],
        'Fireplaces': [1, 0],
        'GarageType': ['Attchd', 'Attchd'],
        'GarageYrBlt': [2021, 2019],
        'GarageArea': [300, 250],
        'PoolArea': [0, 0],
        'PoolQC': ['G', 'G'],
        'Fence': ['G', 'G'],
        'SalePrice': [250000, 195000],
        'Sold': ['Y', 'Y']}
```

- **Since column PoolQc has very less non_null values (if you provide the count here it would be greate) we don't want it.Please remove this column. And changes should refelect in original dataframe.**

Part_4:-

In the end Save your dataframe withname AssginmentOutput.csv make sure that column names should have renamed from BedroomAbvGr with Bedroom and Neighborhood with NeighborArea and also column PoolQc should not be present in the AssginmentOutput.csv.

Quetion 2:-

Probelm statement is I want to create a program where at first I want to take city name as an input from 10 users and after that I want to take latitude and longitude details of that city from same users .
Eg . It shoud look like this -

```
please provide city name - pune
latitude of  pune  56
longitute of  pune 78
please provide city name - Sangli
latitude of  Sangli  88
longitute of  Sangli 32
```

Once you take all the details from users Please take appropriate data structure of your choise

And in the end Please print the details you have taken from all users.

Quetion 3:-

cretate a list of 100 random numbers .Print the generated list and then reverse the list. Print the output.

Quetion 4:-

write a python function to check if it is palindrome or not.
(Eg – pip is palindrome , did is palindrome, radar is palindrome, but assignment is not palindrome, maths, dog ,cat are not palindrome)

Quetion 5:-

Create a maritx of 4 rows and 5 columns. With following values

10	11	12	13	14
15	16	17	18	19
20	21	22	23	24
25	26	27	28	29

and as an ouput I want slice from this matrix which should have follwing values

17	18
22	23
27	28