

```
hadoop fs -mkdir /user/training/RealEstate
```

```
hadoop fs -put /home/training/Desktop/house_apartment_cleaned_data.csv  
/user/training/Realestate
```

```
hadoop fs -ls /user/training/RealEstate
```

```
hive>CREATE TABLE house_apartment (
```

```
    locality STRING,
```

```
    type_of_property STRING,
```

```
    subtype_of_property STRING,
```

```
    price INT,
```

```
    no_of_rooms INT,
```

```
    open_fire INT,
```

```
    terrace INT,
```

```
    garden INT,
```

```
    swimming_pool INT,
```

```
    state_of_building STRING,
```

```
    construction_year INT
```

```
)
```

```
ROW FORMAT DELIMITED
```

```
FIELDS TERMINATED BY ','
```

```
STORED AS TEXTFILE;
```

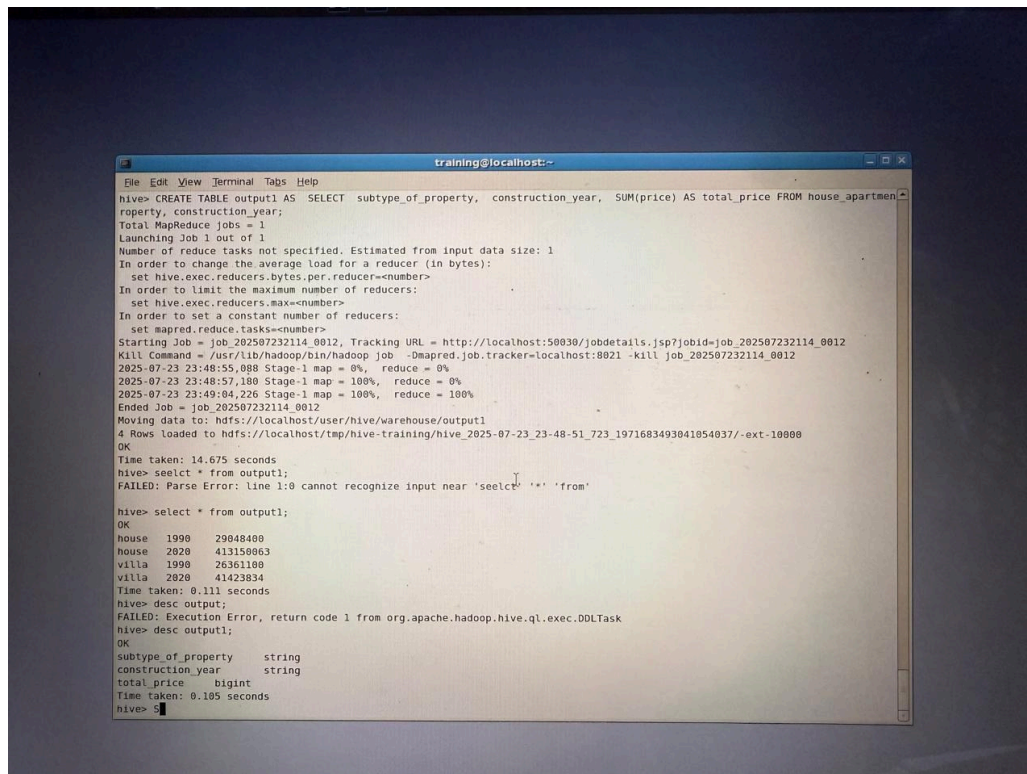
hive> load data inpath 'RealEstate/house_apartment_cleaned_data.csv' into table house_apartment

hive> select * from house_apartment

Que 11) What is the all total price of villa and house and find the difference between the 1990 and 2020

SELECT subtype_of_property, construction_year, SUM(price) AS total_price FROM house_apartment WHERE subtype_of_property IN ('house', 'villa') AND construction_year IN (1990, 2020) GROUP BY subtype_of_property, construction_year

SELECT SUM(CASE WHEN construction_year = 1990 THEN price ELSE 0 END) AS total_price_1990, SUM(CASE WHEN construction_year = 2020 THEN price ELSE 0 END) AS total_price_2020, ABS(SUM(CASE WHEN construction_year = 2020 THEN price ELSE 0 END) - SUM(CASE WHEN construction_year = 1990 THEN price ELSE 0 END)) AS price_difference_2020_vs_1990 FROM house_apartment WHERE subtype_of_property IN ('house', 'villa') AND construction_year IN (1990, 2020);



```
training@localhost:~$
File Edit View Terminal Tabs Help
hive> CREATE TABLE output1 AS SELECT subtype_of_property, construction_year, SUM(price) AS total_price FROM house_apartment;
Total MapReduce jobs = 1
Launching Job 1 out of 1
Number of reduce tasks not specified. Estimated from input data size: 1
In order to change the average load for a reducer (in bytes):
  set hive.exec.reducers.bytes.per.reducer=<number>
In order to limit the maximum number of reducers:
  set hive.exec.reducers.max=<number>
In order to set a constant number of reducers:
  set mapred.reduce.tasks=<number>
Starting Job = job_202507232114_0012, Tracking URL = http://localhost:50030/jobdetails.jsp?jobid=job_202507232114_0012
Kill Command = /usr/lib/hadoop/bin/hadoop job -Dmapred.job.tracker=localhost:8021 -kill job_202507232114_0012
2025-07-23 23:48:55,088 Stage-1 map = 0%, reduce = 0%
2025-07-23 23:48:57,180 Stage-1 map = 100%, reduce = 0%
2025-07-23 23:49:04,226 Stage-1 map = 100%, reduce = 100%
Ended Job = job_202507232114_0012
Moving data to: hdfs://localhost/user/hive/warehouse/output1
4 Rows loaded to hdfs://localhost/tmp/hive-training/hive_2025-07-23_23_48-51_723_1971683493041054037/-ext-10000
OK
Time taken: 14.675 seconds
hive> select * from output1;
FAILED: Parse Error: line 1:0 cannot recognize input near 'select' '*' 'from'
hive> select * from output1;
OK
house 1990 29048400
house 2020 413150063
villa 1990 26361108
villa 2020 41423834
Time taken: 0.111 seconds
hive> desc output1;
FAILED: Execution Error, return code 1 from org.apache.hadoop.hive.ql.exec.DDLTask
hive> desc output1;
OK
subtype_of_property  string
construction_year    string
total_price          bigint
Time taken: 0.105 seconds
hive>
```

```
training@localhost:~$
File Edit View Terminal Tags Help
OK
subtype_of_property    string
construction_year      string
total_price            bigint
Time taken: 0.105 seconds
hive> CREATE TABLE output2 AS SELECT SUM(CASE WHEN construction_year = 1990 THEN price ELSE 0 END) AS total_price_1990, SUM(CASE WHEN construction_year = 2020 THEN price ELSE 0 END) AS total_price_2020, ABS(SUM(CASE WHEN construction_year = 2020 THEN price ELSE 0 END) - SUM(CASE WHEN construction_year = 1990 THEN price ELSE 0 END)) AS price_difference_2020_vs_1990 FROM house_apartment WHERE subtype_of_property IN ('house', 'villa') AND construction_year IN (1990, 2020);
Total MapReduce jobs = 1
Launching Job 1 out of 1
Number of reduce tasks determined at compile time: 1
In order to change the average load for a reducer (in bytes):
  set hive.exec.reducers.bytes.per.reducer=<number>
In order to limit the maximum number of reducers:
  set hive.exec.reducers.max=<number>
In order to set a constant number of reducers:
  set mapred.reduce.tasks=<number>
Starting Job = job_202507232114_0013, Tracking URL = http://localhost:50030/jobdetails.jsp?jobid=job_202507232114_0013
Kill Command = /usr/lib/hadoop/bin/hadoop job -Dmapred.job.tracker=localhost:8021 -kill job_202507232114_0013
2025-07-23 23:53:18,963 Stage-1 map = 0%, reduce = 0%
2025-07-23 23:53:20,063 Stage-1 map = 100%, reduce = 0%
2025-07-23 23:53:27,090 Stage-1 map = 100%, reduce = 33%
2025-07-23 23:53:28,104 Stage-1 map = 100%, reduce = 100%
Ended Job = job_202507232114_0013
Moving data to: hdfs://localhost/user/hive/warehouse/output2
1 Rows loaded to hdfs://localhost/tmp/hive-training/hive_2025-07-23_23-53-16_541_7165875961896876991/-ext-10000
OK
Time taken: 12.658 seconds
hive> select * from output2;
OK
55409500      454573897      399164397
Time taken: 0.094 seconds
hive> desc output2;
OK
total_price_1990      bigint
total_price_2020      bigint
price_difference_2020_vs_1990  bigint
Time taken: 0.061 seconds
hive>
```

Que 12) **Total no. of house to renovate and all renovate belong to which year**

select count(*) as Total_toRenovate from house_apartment where type_of_property = 'house' and state_of_building = 'to renovate';

select subtype_of_property, construction_year from house_apartment where type_of_property = 'house' and state_of_building = 'to renovate' and construction_year != 'None';

```

training@localhost:~
File Edit View Terminal Tabs Help
2025-07-23 23:53:20,063 Stage-1 map = 100%, reduce = 0%
2025-07-23 23:53:27,098 Stage-1 map = 100%, reduce = 33%
2025-07-23 23:53:28,104 Stage-1 map = 100%, reduce = 100%
Ended Job = job_202507232114_0013
Moving data to: hdfs://localhost/user/hive/warehouse/output2
1 Rows loaded to hdfs://localhost/tmp/hive-training/hive_2025-07-23_23-53-16_541_7165875961096876991/-ext-10000
OK
Time taken: 12.658 seconds
hive> select * from output2;
OK
55409500      454573897      399164397
Time taken: 0.094 seconds
hive> desc output2;
OK
total_price_1990      bigint
total_price_2020      bigint
price_difference_2020 vs_1990      bigint
Time taken: 0.061 seconds
hive> select count(*) as Total_toRenovate from house_apartment where type_of_property = 'house' and state_of_building = 'to renovate';
Total MapReduce jobs = 1
Launching Job 1 out of 1
Number of reduce tasks determined at compile time: 1
In order to change the average load for a reducer (in bytes):
  set hive.exec.reducers.bytes.per.reducer=<number>
In order to limit the maximum number of reducers:
  set hive.exec.reducers.max=<number>
In order to set a constant number of reducers:
  set mapred.reduce.tasks=<number>
Starting Job = job_202507232114_0014, Tracking URL = http://localhost:50030/jobdetails.jsp?jobid=job_202507232114_0014
Kill Command = /usr/lib/hadoop/bin/hadoop job -Dmapred.job.tracker=localhost:8021 -kill job_202507232114_0014
2025-07-23 23:55:50,305 Stage-1 map = 0%, reduce = 0%
2025-07-23 23:55:51,312 Stage-1 map = 100%, reduce = 0%
2025-07-23 23:55:58,346 Stage-1 map = 100%, reduce = 33%
2025-07-23 23:55:59,354 Stage-1 map = 100%, reduce = 100%
Ended Job = job_202507232114_0014
OK
2982
Time taken: 11.609 seconds
hive>

```



```
training@localhost:~  
File Edit View Terminal Tabs Help  
mixed use building 1976  
house 1952  
apartment block 1830  
house 1939  
house 1938  
house 1961  
house 1930  
house 1968  
house 1951  
country cottage 1940  
house 1919  
house 1950  
house 1978  
house 1933  
house 1959  
house 1930  
house 1956  
mixed use building 1950  
house 1965  
villa 1910  
house 1900  
house 1935  
country cottage 1932  
house 1958  
apartment block 1915  
farmhouse 1850  
house 1920  
villa 1978  
villa 1997  
apartment block 1930  
house 1969  
house 1948  
house 1958  
bungalow 1977  
house 1850  
house 1952  
house 1784  
house 1932  
house 1937  
house 1930
```