

--1. create below tables and insert, update and delete some records from it.

--Table name : prod\_catg\_dtls

--column name	data_type	constraint_type
--prod_catg_id	number	PK
--prod_catg_name	varchar	not null

--Table\_name : Prodct\_details

--column name	data_type	constraint_type
--prod_id	number	PK
--prod_name	varchar	not null
--prod_catg_id	number	FK
--Price	number(8,2)	check
--prod_bar_code	varchar	unique
--prod_exp_Date	date	check
--prod_mnft_loc	varchar	default 'Mumbai'

Answer :

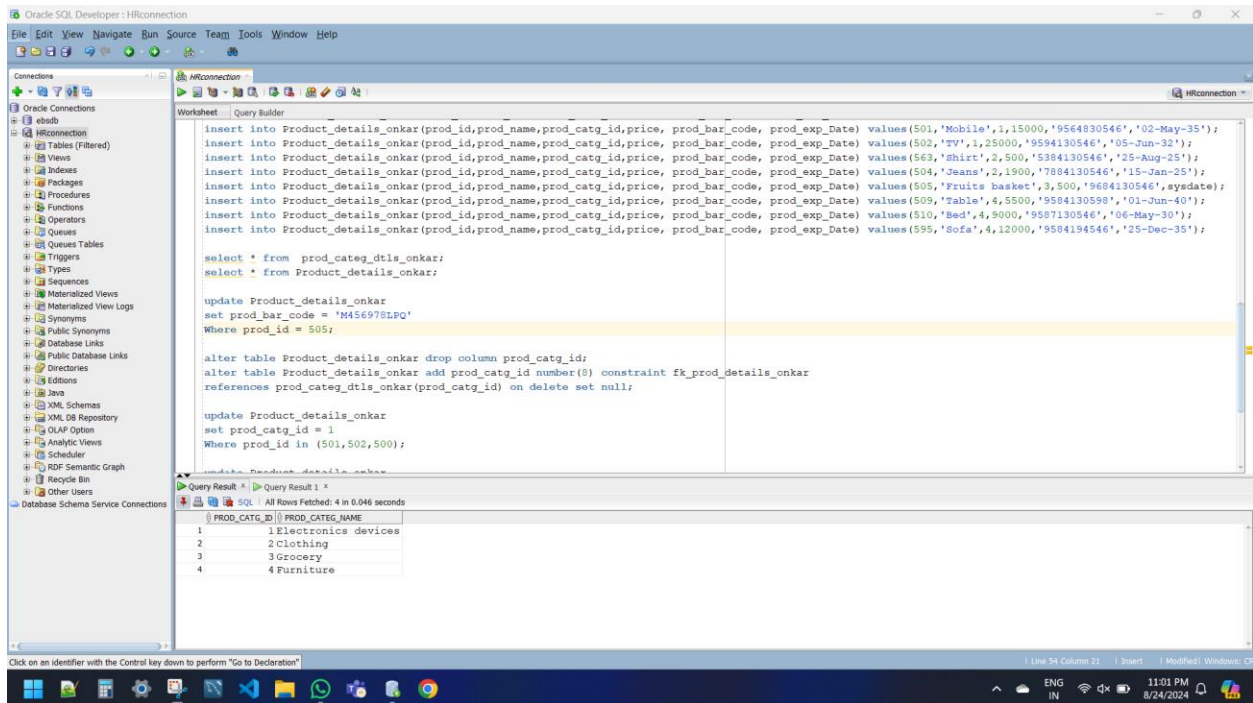
```
create table prod_catg_dtls_onkar(  
  prod_catg_id number(8) constraint pk_prod_catg_onkar primary key,  
  prod_catg_name varchar2(20) constraint prod_catg_name_onkar not null  
);
```

```
insert into prod_catg_dtls_onkar values(1,'Electronics devices');
```

```
insert into prod_catg_dtls_onkar values(2,'Clothing');
```

```
insert into prod_catg_dtls_onkar values(3,'Grocery');
```

```
insert into prod_catg_dtls_onkar values(4,'Furniture');
```



```

create table Product_details_onkar(
prod_id number(8) constraint pk_prod_details_onkar primary key,
prod_name varchar2(20) constraint prod_details_name_onkar not null,
prod_catg_id number(8) constraint fk_prod_details_onkar references
prod_catgeg_dtls_onkar(prod_catg_id) on delete set null,
price number(8,2) constraint price_prod_details_onkar check(price>0),
prod_bar_code varchar2(30) constraint barcode_prod_details_onkar UNIQUE,
prod_exp_Date date constraint exp_date_prod_details_onkar
check(to_Char(prod_exp_Date,'DD-MON-YY') is not null),
prod_mnft_loc varchar2(20) default 'Mumbai'
);

```

```

insert into Product_details_onkar(prod_id,prod_name,prod_catg_id,price, prod_bar_code,
prod_exp_Date) values(500,'Laptop',1,55000,'9584130546','25-Jun-30');

```

insert into Product\_details\_onkar(prod\_id,prod\_name,prod\_catg\_id,price, prod\_bar\_code, prod\_exp\_Date) values(501,'Mobile',1,15000,'9564830546','02-May-35');

insert into Product\_details\_onkar(prod\_id,prod\_name,prod\_catg\_id,price, prod\_bar\_code, prod\_exp\_Date) values(502,'TV',1,25000,'9594130546','05-Jun-32');

insert into Product\_details\_onkar(prod\_id,prod\_name,prod\_catg\_id,price, prod\_bar\_code, prod\_exp\_Date) values(563,'Shirt',2,500,'5384130546','25-Aug-25');

insert into Product\_details\_onkar(prod\_id,prod\_name,prod\_catg\_id,price, prod\_bar\_code, prod\_exp\_Date) values(504,'Jeans',2,1900,'7884130546','15-Jan-25');

insert into Product\_details\_onkar(prod\_id,prod\_name,prod\_catg\_id,price, prod\_bar\_code, prod\_exp\_Date) values(505,'Fruits basket',3,500,'9684130546',sysdate);

insert into Product\_details\_onkar(prod\_id,prod\_name,prod\_catg\_id,price, prod\_bar\_code, prod\_exp\_Date) values(509,'Table',4,5500,'9584130598','01-Jun-40');

insert into Product\_details\_onkar(prod\_id,prod\_name,prod\_catg\_id,price, prod\_bar\_code, prod\_exp\_Date) values(510,'Bed',4,9000,'9587130546','06-May-30');

insert into Product\_details\_onkar(prod\_id,prod\_name,prod\_catg\_id,price, prod\_bar\_code, prod\_exp\_Date) values(595,'Sofa',4,12000,'9584194546','25-Dec-35');

The screenshot shows the Oracle SQL Developer interface. The main window displays a series of SQL queries in the 'Worksheet' tab. The queries include multiple insert statements for the 'Product\_details\_onkar' table, an update statement for 'prod\_bar\_code', and table alteration statements for 'Product\_details\_onkar'. Below the queries, the 'Query Result' tab shows the results of the first query, which is a select statement from 'prod\_catg\_dtls\_onkar'. The result is a table with 9 rows and 7 columns: PROD\_ID, PROD\_NAME, PROD\_CATG\_ID, PRICE, PROD\_BAR\_CODE, PROD\_EXP\_DATE, and PROD\_MNFT\_LOC.

PROD_ID	PROD_NAME	PROD_CATG_ID	PRICE	PROD_BAR_CODE	PROD_EXP_DATE	PROD_MNFT_LOC
1	500Laptop	1	55000	9584130546	25-JUN-30	Mumbai
2	501Mobile	1	15000	9564830546	02-MAY-35	Mumbai
3	502TV	1	25000	9594130546	05-JUN-32	Mumbai
4	563Shirt	2	500	5384130546	25-AUG-25	Mumbai
5	504Jeans	2	1900	7884130546	15-JAN-25	Mumbai
6	505Fruits basket	3	500	9684130546	24-AUG-24	Mumbai
7	509Table	4	5500	9584130598	01-JUN-40	Mumbai
8	510Bed	4	9000	9587130546	06-MAY-30	Mumbai
9	595Sofa	4	12000	9584194546	25-DEC-35	Mumbai

select \* from prod\_catg\_dtls\_onkar;

select \* from Product\_details\_onkar;

update Product\_details\_onkar

set prod\_bar\_code = 'M456978LPQ'

Where prod\_id = 505;

The screenshot shows the Oracle SQL Developer interface. The main window displays a SQL script with the following queries:

```
insert into Product_details_onkar(prod_id,prod_name,prod_catg_id,price, prod_bar_code, prod_exp_Date) values(504,'Jeans',2,1900,'7884130546','15-Jan-25');
insert into Product_details_onkar(prod_id,prod_name,prod_catg_id,price, prod_bar_code, prod_exp_Date) values(505,'Fruits basket',3,500,'9684130546',sysdate);
insert into Product_details_onkar(prod_id,prod_name,prod_catg_id,price, prod_bar_code, prod_exp_Date) values(509,'Table',4,5500,'9584130598','01-Jun-40');
insert into Product_details_onkar(prod_id,prod_name,prod_catg_id,price, prod_bar_code, prod_exp_Date) values(510,'Bed',4,9000,'9587130546','06-May-30');
insert into Product_details_onkar(prod_id,prod_name,prod_catg_id,price, prod_bar_code, prod_exp_Date) values(595,'Sofa',4,12000,'9584194546','25-Dec-35');

select * from prod_catg_dtls_onkar;
select * from Product_details_onkar;

update Product_details_onkar
set prod_bar_code = 'M456978LPQ'
where prod_id = 505;

alter table Product_details_onkar drop column prod_catg_id;
alter table Product_details_onkar add prod_catg_id number(8) constraint fk_prod_details_onkar
references prod_catg_dtls_onkar(prod_catg_id) on delete set null;

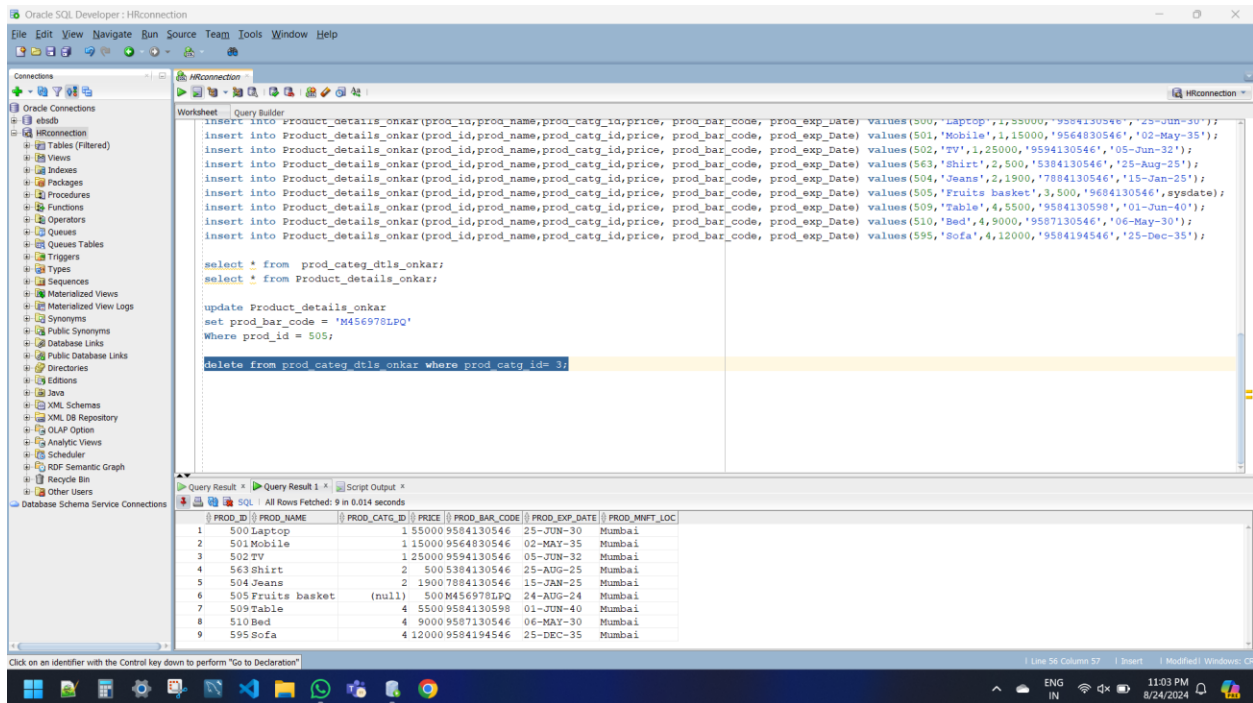
update Product_details_onkar
set prod_catg_id = 1
where prod_id in (501,502,500);

update Product_details_onkar
set prod_catg_id = 4
where prod_id in (509,595,510);
```

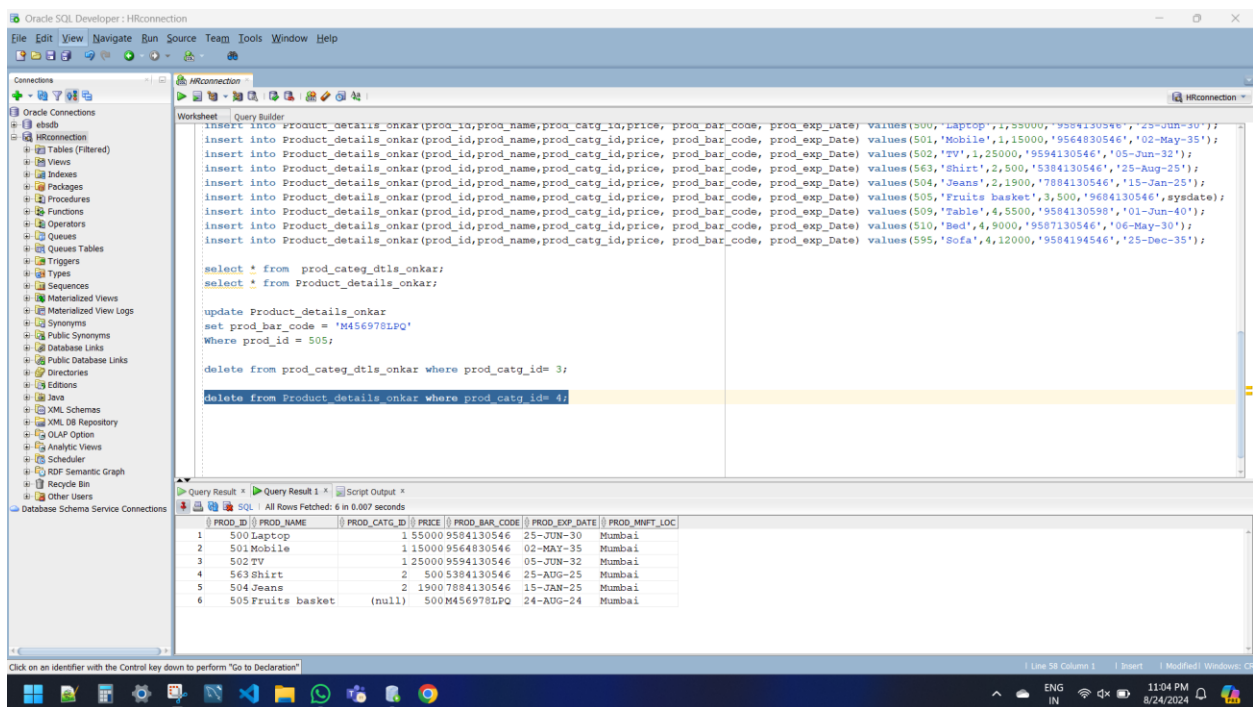
The query results are displayed in a table with the following data:

PROD_ID	PROD_NAME	PROD_CATG_ID	PRICE	PROD_BAR_CODE	PROD_EXP_DATE	PROD_MFMT_LOC
1	500 Laptop	1	55000	9584130546	25-JUN-30	Mumbai
2	501 Mobile	1	15000	9564930546	02-MAY-35	Mumbai
3	502 TV	1	25000	9594130546	05-JUN-32	Mumbai
4	563 Shirt	2	500	5384130546	25-ADG-25	Mumbai
5	504 Jeans	2	1900	7884130546	15-JAN-25	Mumbai
6	505 Fruits basket	3	500	M456978LPQ	24-ADG-24	Mumbai
7	509 Table	4	5500	9584130598	01-JUN-40	Mumbai
8	510 Bed	4	9000	9587130546	06-MAY-30	Mumbai
9	595 Sofa	4	12000	9584194546	25-DEC-35	Mumbai

delete from prod\_catg\_dtls\_onkar where prod\_catg\_id= 3;



delete from Product\_details\_onkar where prod\_catg\_id= 4;

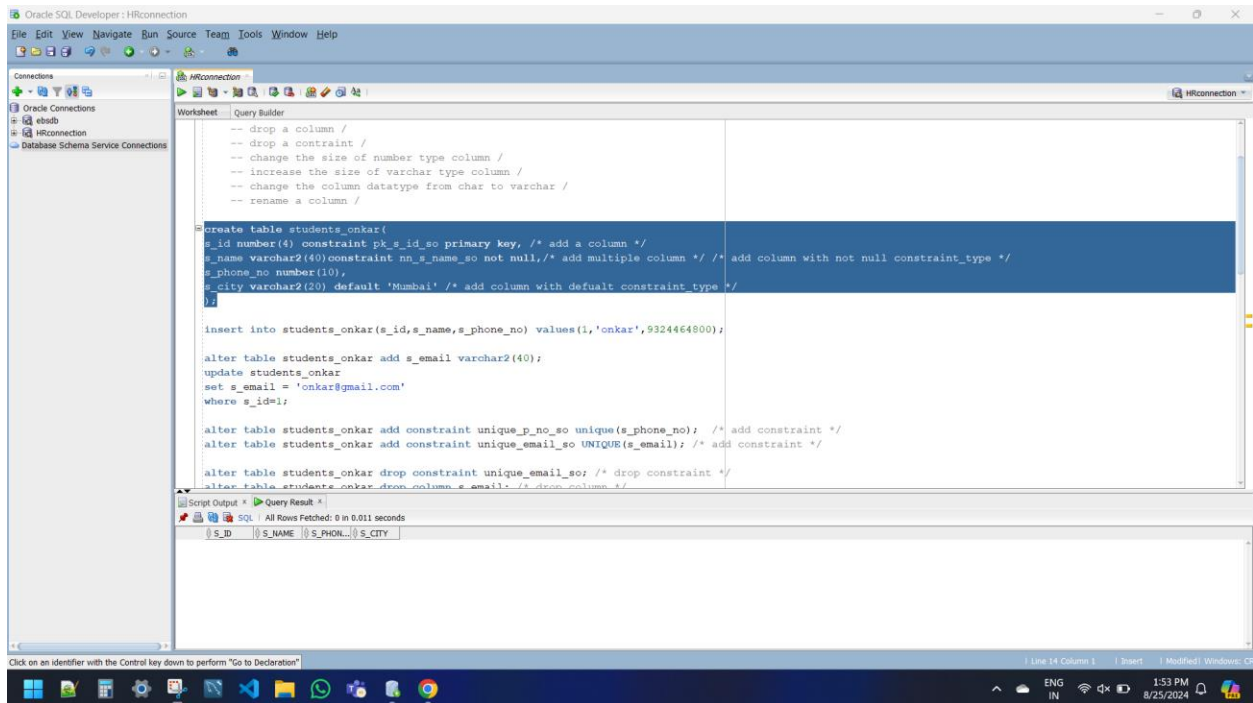


--2. create a student table and perform below operations on it

```
-- add a column /  
-- add multiple column /  
-- add column with not null constraint_type /  
-- add column with default constraint_type /  
-- add constraint /  
-- drop a column /  
-- drop a constraint /  
-- change the size of number type column /  
-- increase the size of varchar type column /  
-- change the column datatype from char to varchar /  
-- rename a column /
```

Answer :

```
create table students_onkar(  
  s_id number(4) constraint pk_s_id_so primary key, /* add a column */  
  s_name varchar2(40) constraint nn_s_name_so not null, /* add multiple column / / add  
  column with not null constraint_type */  
  s_phone_no number(10),  
  s_city varchar2(20) default 'Mumbai' /* add column with default constraint_type */  
);  
  
insert into students_onkar(s_id,s_name,s_phone_no) values(1,'onkar',9324464800);
```



```
alter table students_onkar add s_email varchar2(40);
```

```
update students_onkar
```

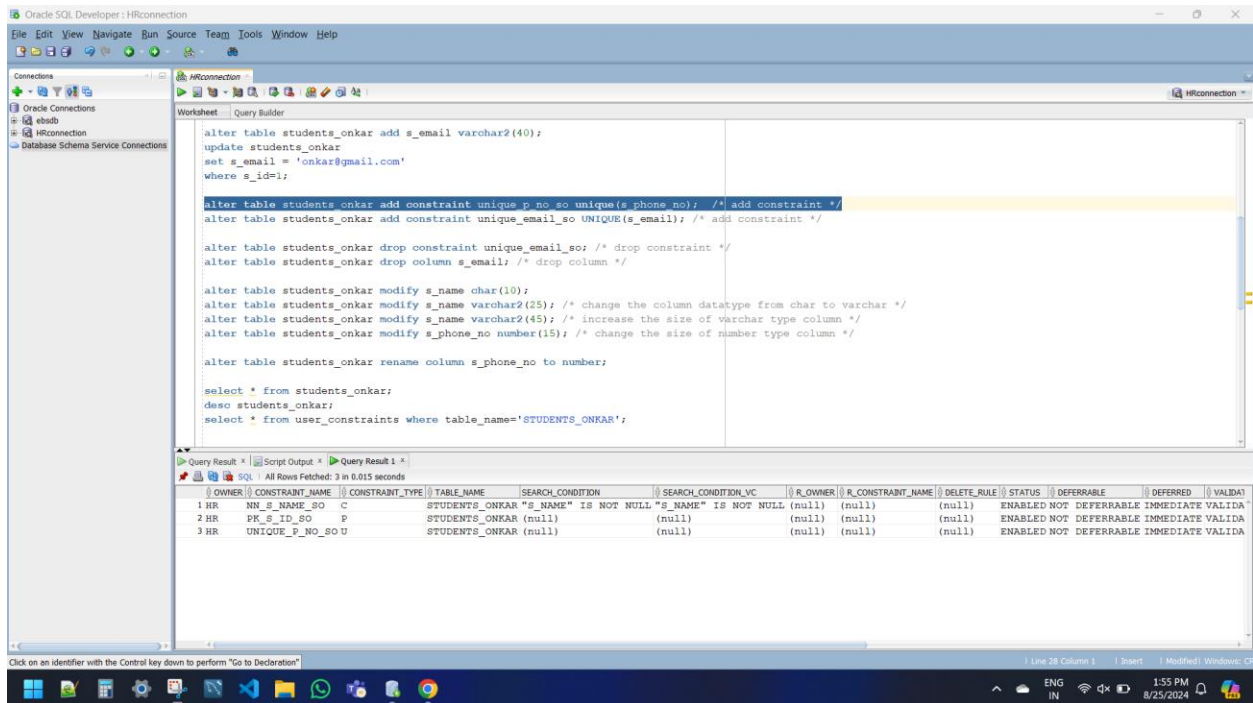
```
set s_email = 'onkar@gmail.com'
```

```
where s_id=1;
```

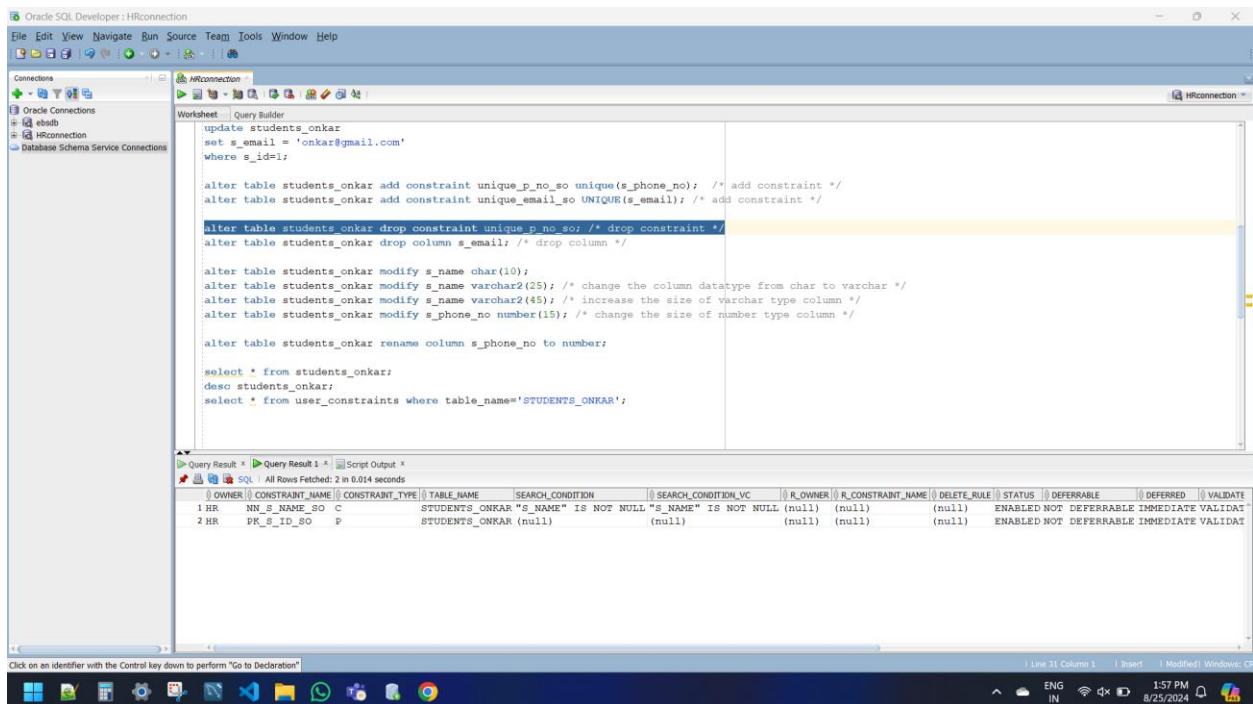
```
alter table students_onkar add constraint unique_p_no_so unique(s_phone_no); /* add  
constraint */
```

```
alter table students_onkar add constraint unique_email_so UNIQUE(s_email); /* add  
constraint */
```



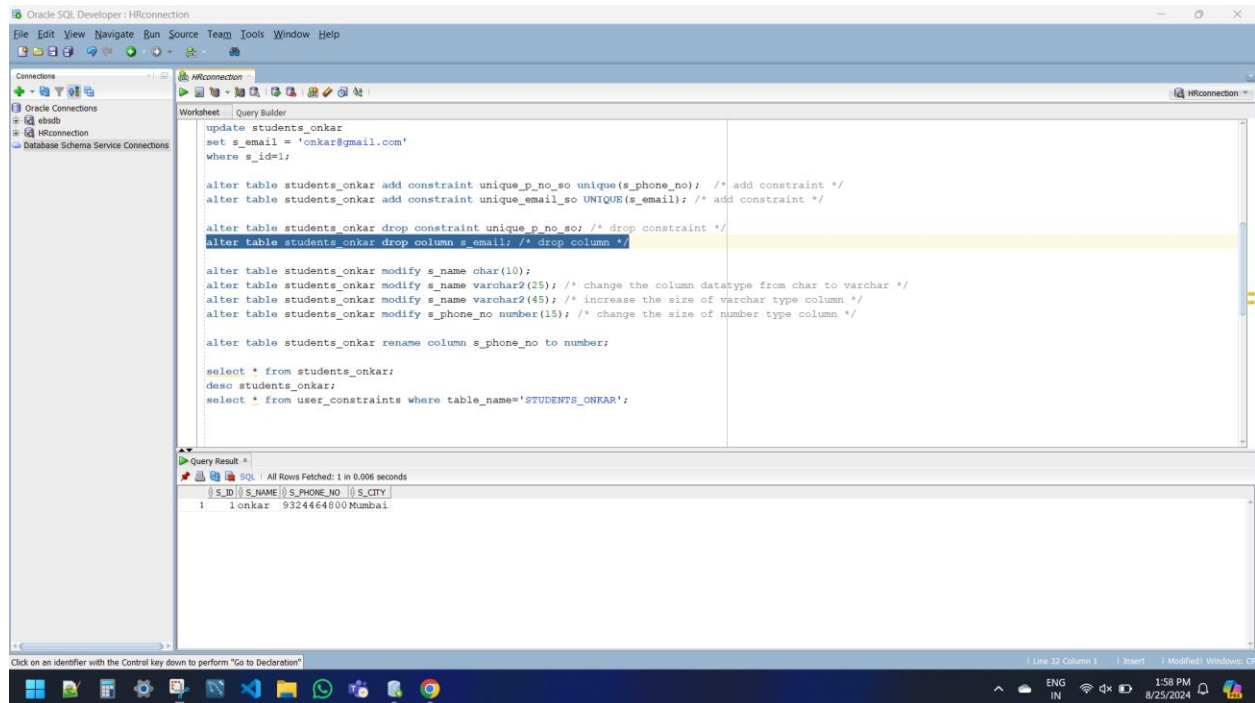


alter table students\_onkar drop constraint unique\_p\_no\_so; /\* drop constraint \*/



alter table students\_onkar drop column s\_email; /\* drop column \*/





alter table students\_onkar modify s\_name char(10);

alter table students\_onkar modify s\_name varchar2(25); /\* change the column datatype from char to varchar \*/

alter table students\_onkar modify s\_name varchar2(45); /\* increase the size of varchar type column \*/

alter table students\_onkar modify s\_phone\_no number(15); /\* change the size of number type column \*/

Oracle SQL Developer: HRConnection

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Connections

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HRConnection

Database Schema Service Connections

Worksheet Query Builder

```

update students_onkar
set s_email = 'onkar@gmail.com'
where s_id=1;

alter table students_onkar add constraint unique_p_no_so unique(s_phone_no); /* add constraint */
alter table students_onkar add constraint unique_email_so UNIQUE(s_email); /* add constraint */

alter table students_onkar drop constraint unique_p_no_so; /* drop constraint */
alter table students_onkar drop column s_email; /* drop column */

alter table students_onkar modify s_name char(10);
alter table students_onkar modify s_name varchar2(25); /* change the column datatype from char to varchar */
alter table students_onkar modify s_name varchar2(45); /* increase the size of varchar type column */
alter table students_onkar modify s_phone_no number(15); /* change the size of number type column */

alter table students_onkar rename column s_phone_no to number;

select * from students_onkar;
desc students_onkar;
select * from user_constraints where table_name='STUDENTS_ONKAR';

```

Script Output

Task completed in 0.095 seconds

Name	Null?	Type
S_ID	NOT NULL	NUMBER (4)
S_NAME	NOT NULL	VARCHAR2 (25)
S_PHONE_NO		NUMBER (10)
S_CITY		VARCHAR2 (20)

Click on an identifier with the Control key down to perform "Go to Declaration"

Line 35 Column 1 | Insert | Modified: Windows: CF

1:59 PM 8/25/2024

Oracle SQL Developer: HRConnection

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Connections

Oracle Connections

HRConnection

Database Schema Service Connections

Worksheet Query Builder

```

update students_onkar
set s_email = 'onkar@gmail.com'
where s_id=1;

alter table students_onkar add constraint unique_p_no_so unique(s_phone_no); /* add constraint */
alter table students_onkar add constraint unique_email_so UNIQUE(s_email); /* add constraint */

alter table students_onkar drop constraint unique_p_no_so; /* drop constraint */
alter table students_onkar drop column s_email; /* drop column */

alter table students_onkar modify s_name char(10);
alter table students_onkar modify s_name varchar2(25); /* change the column datatype from char to varchar */
alter table students_onkar modify s_name varchar2(45); /* increase the size of varchar type column */
alter table students_onkar modify s_phone_no number(15); /* change the size of number type column */

alter table students_onkar rename column s_phone_no to number;

select * from students_onkar;
desc students_onkar;
select * from user_constraints where table_name='STUDENTS_ONKAR';

```

Script Output

Task completed in 0.062 seconds

S\_CITY VARCHAR2 (20)

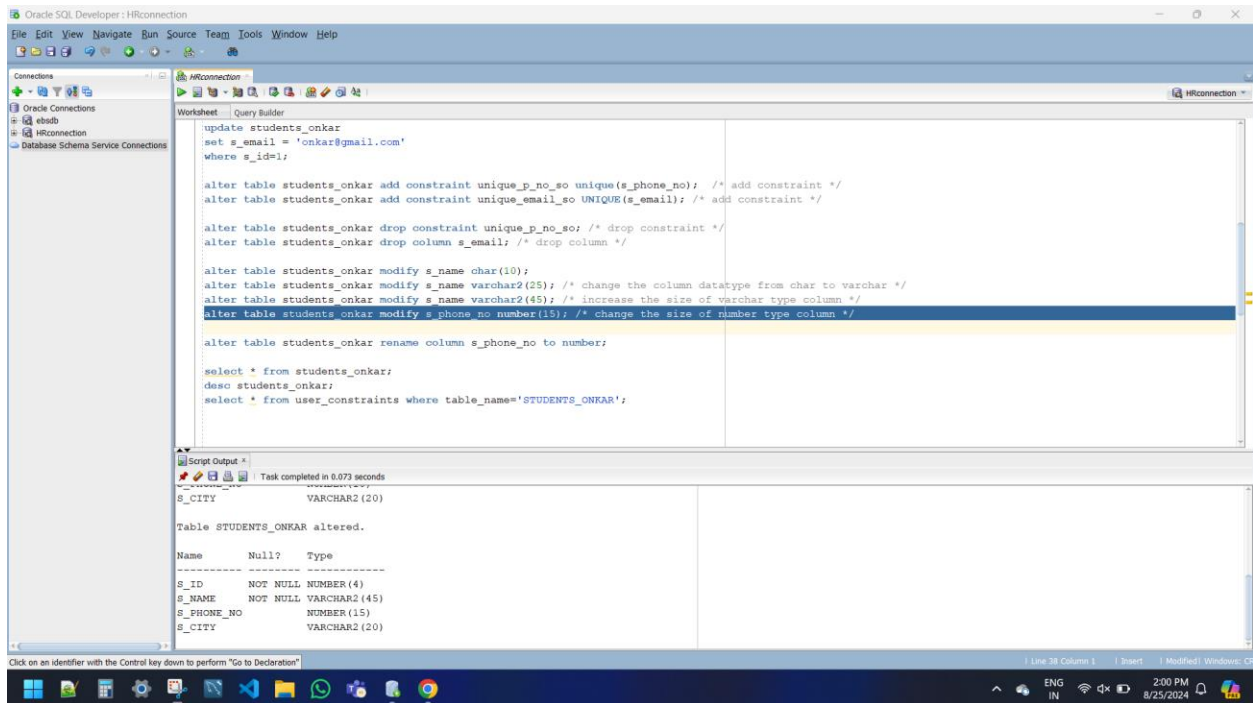
Table STUDENTS\_ONKAR altered.

Name	Null?	Type
S_ID	NOT NULL	NUMBER (4)
S_NAME	NOT NULL	VARCHAR2 (45)
S_PHONE_NO		NUMBER (10)
S_CITY		VARCHAR2 (20)

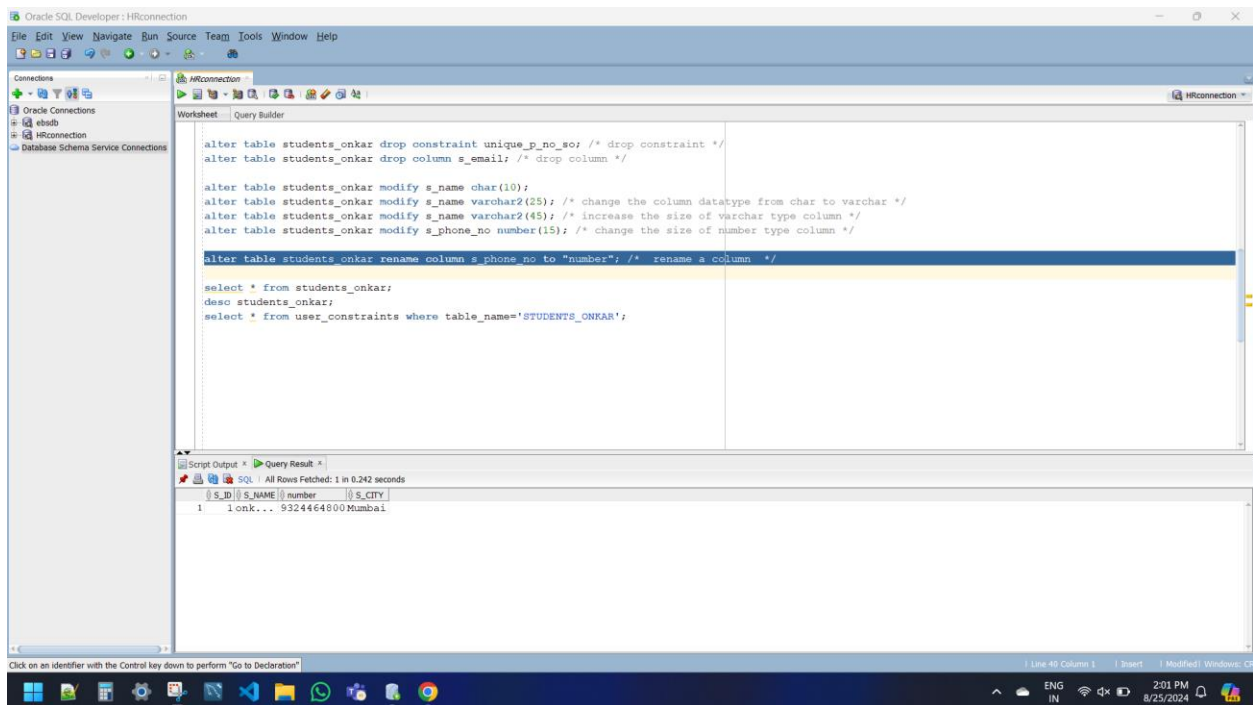
Click on an identifier with the Control key down to perform "Go to Declaration"

Line 37 Column 1 | Insert | Modified: Windows: CF

2:00 PM 8/25/2024



alter table students\_onkar rename column s\_phone\_no to "number"; /\* rename a column \*/



select \* from students\_onkar;

desc students\_onkar;

```
select * from user_constraints where table_name='STUDENTS_ONKAR';
```

--3. create a table to store gadget details and perform below operation

```
-- add records using different insert command methods /  
-- add a new column /  
-- rename table /  
-- truncate table /  
-- drop table /  
-- add comment for table and it in results /  
-- add comment for each column and show it in results /
```

Answer :

```
create table gadget_details(  
g_id number(8) constraint pk_gid_gd primary key,  
g_name varchar2(40) constraint nn_g_name_gd not null,  
g_type varchar2(40) default 'Electronic Device',  
g_price number(8,2) constraint check_price_gd check(g_price>0)  
);
```

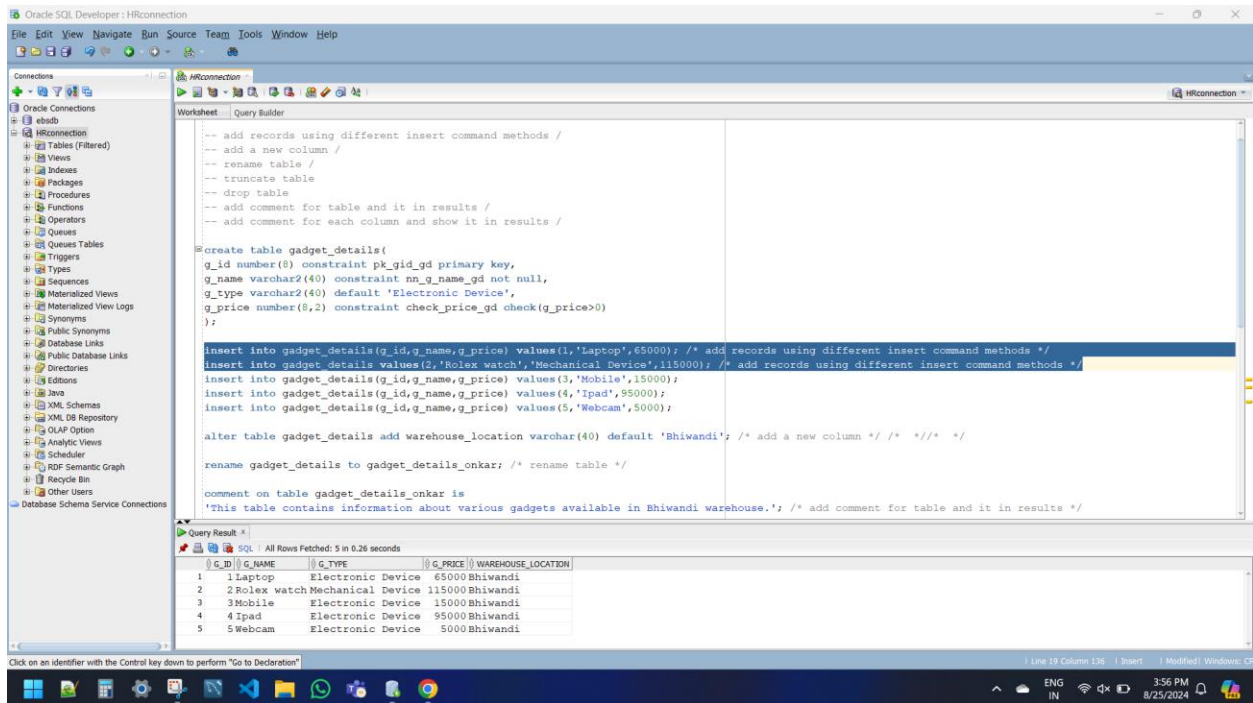
```
insert into gadget_details(g_id,g_name,g_price) values(1,'Laptop',65000); /* add records  
using different insert command methods */
```

```
insert into gadget_details values(2,'Rolex watch','Mechanical Device',115000); /* add  
records using different insert command methods */
```

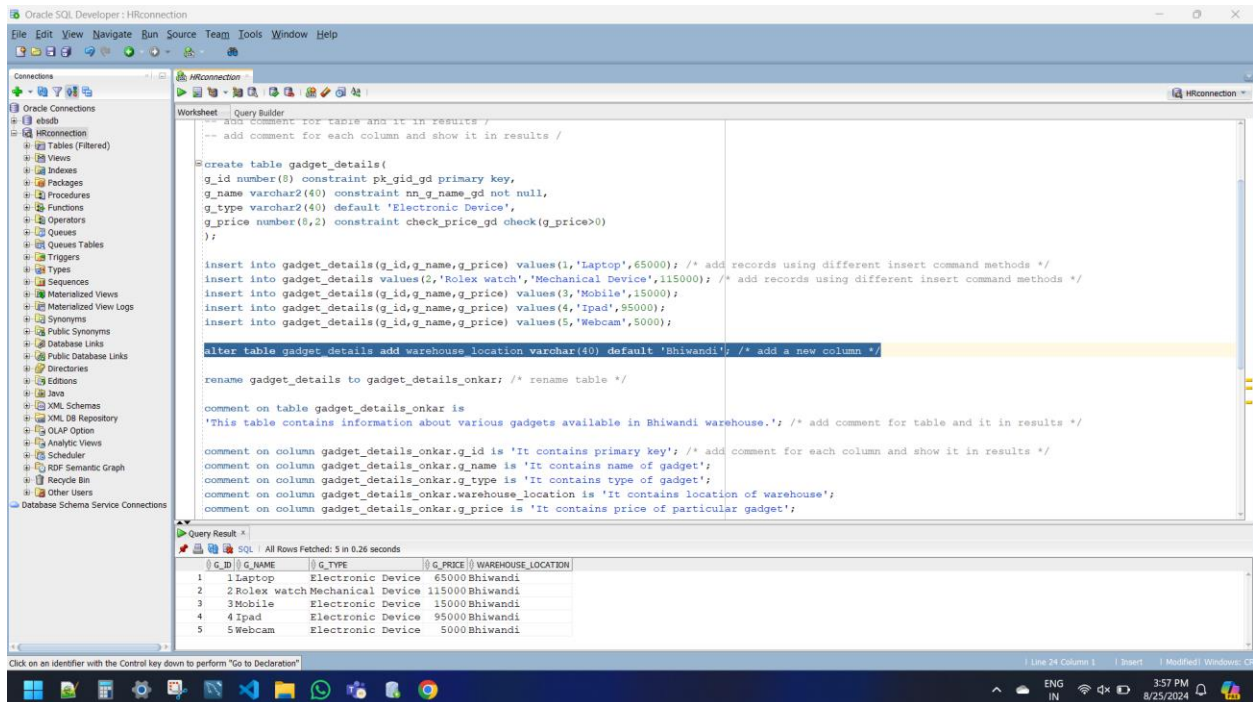
```
insert into gadget_details(g_id,g_name,g_price) values(3,'Mobile',15000);
```

```
insert into gadget_details(g_id,g_name,g_price) values(4,'Ipad',95000);
```

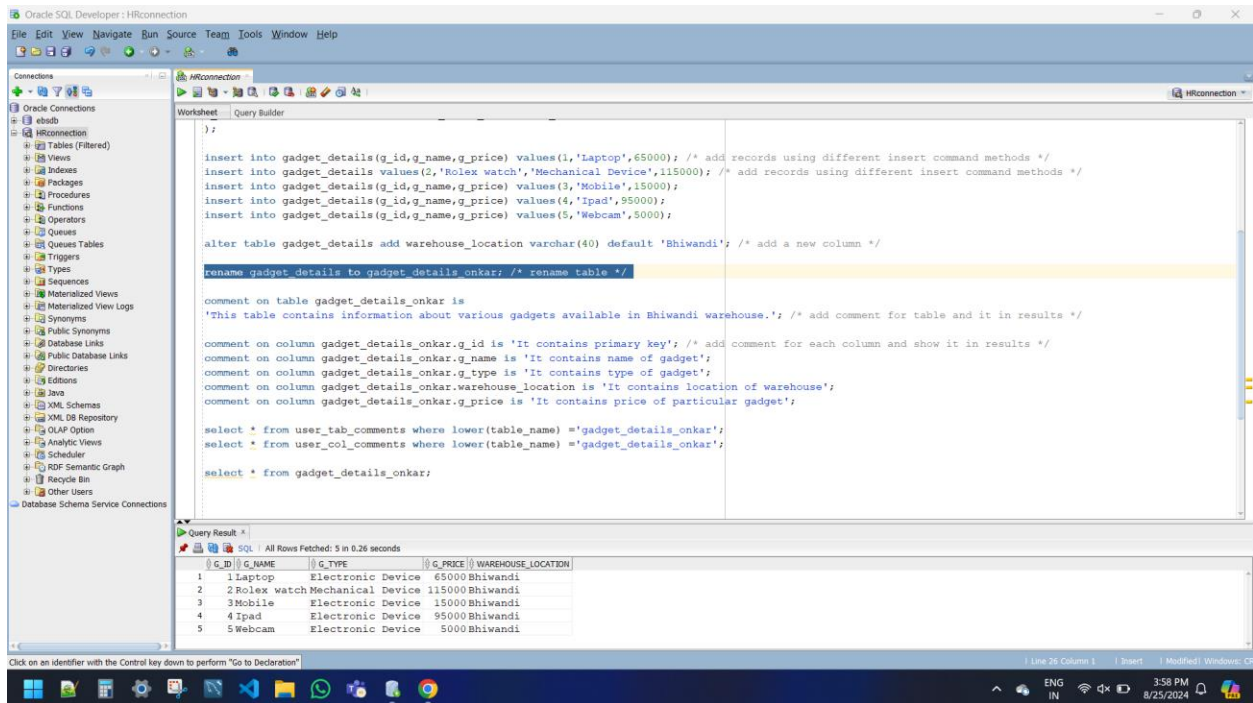
```
insert into gadget_details(g_id,g_name,g_price) values(5,'Webcam',5000);
```



alter table gadget\_details add warehouse\_location varchar(40) default 'Bhiwandi'; /\* add a new column \*/



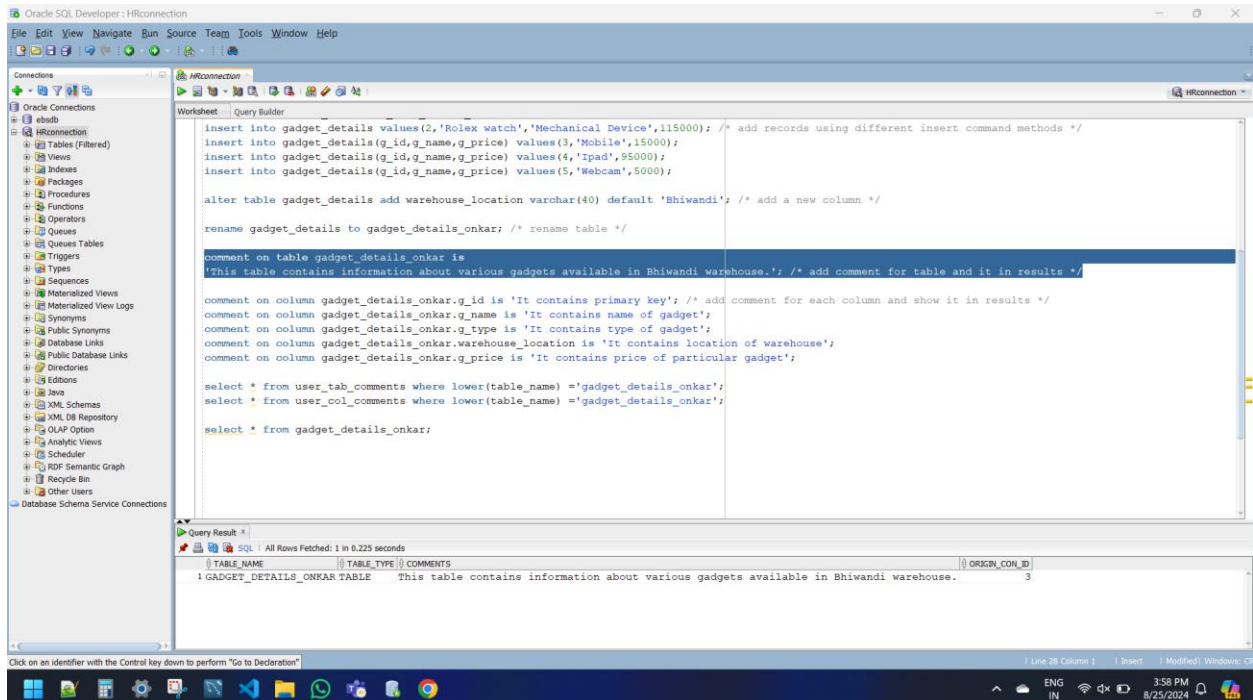
rename gadget\_details to gadget\_details\_onkar; /\* rename table \*/



comment on table gadget\_details\_onkar is

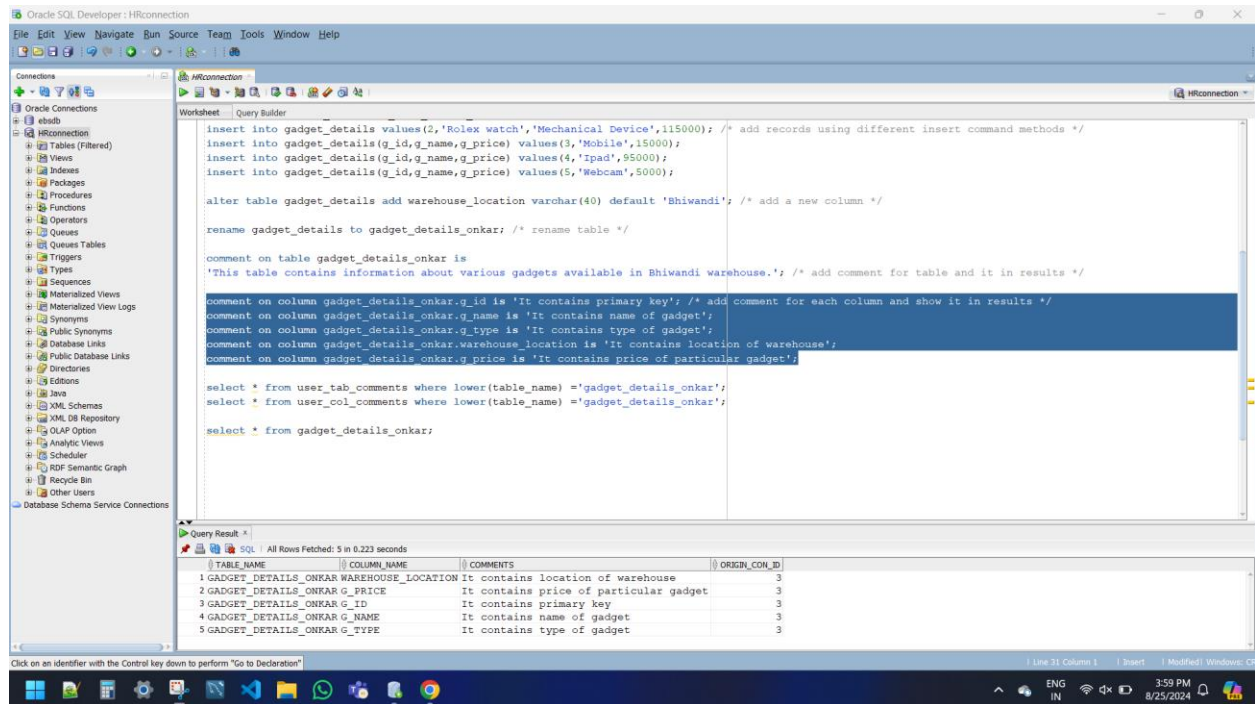
'This table contains information about various gadgets available in Bhiwandi warehouse.';

/\* add comment for table and it in results \*/





comment on column gadget\_details\_onkar.g\_id is 'It contains primary key'; /\* add comment for each column and show it in results \*/



comment on column gadget\_details\_onkar.g\_name is 'It contains name of gadget';

comment on column gadget\_details\_onkar.g\_type is 'It contains type of gadget';

comment on column gadget\_details\_onkar.warehouse\_location is 'It contains location of warehouse';

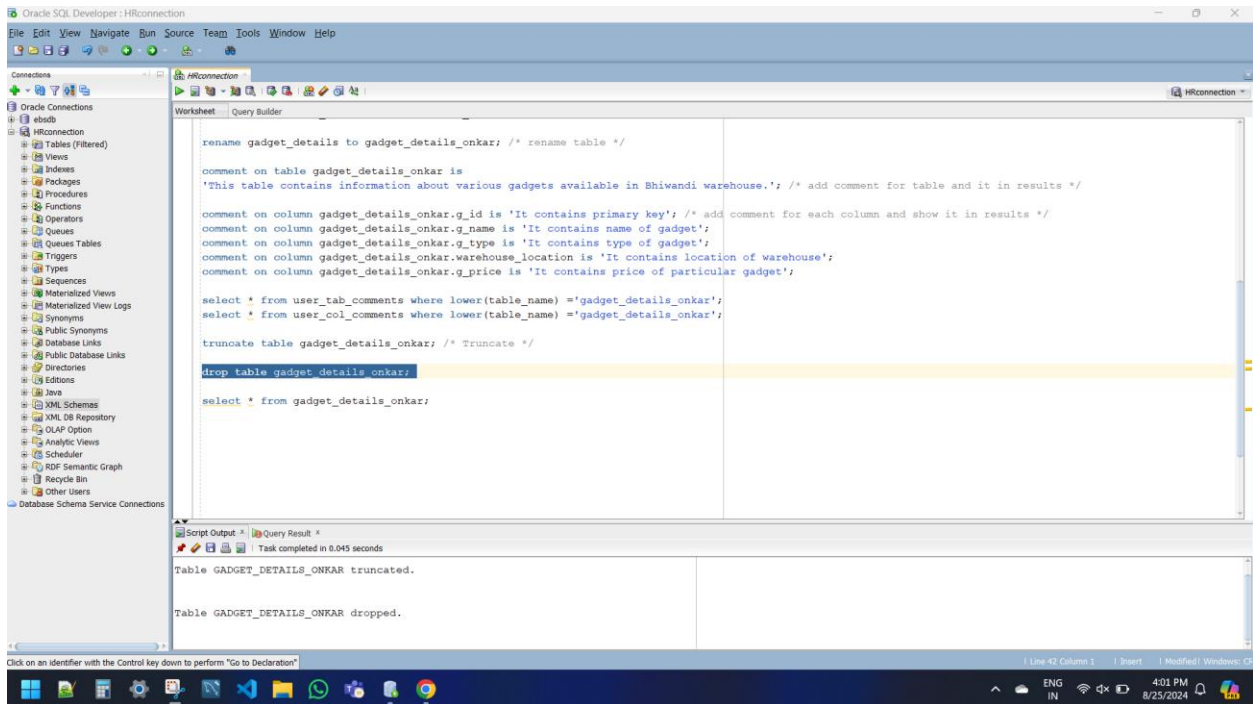
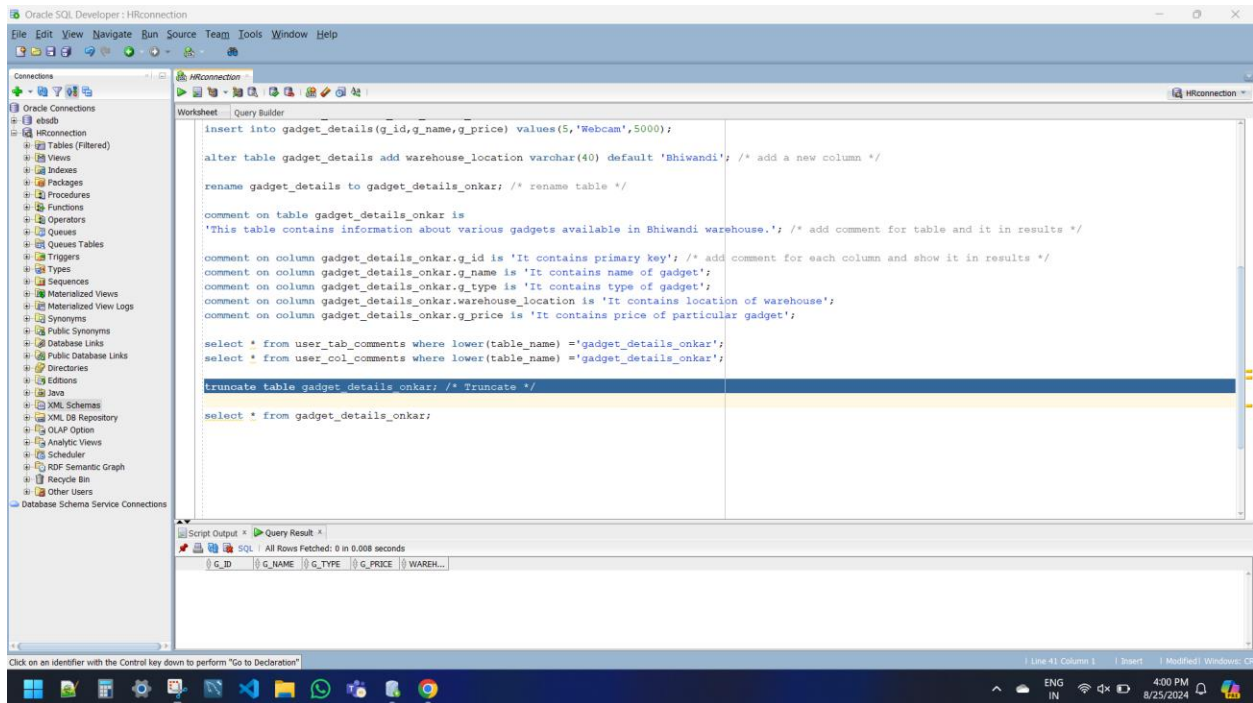
comment on column gadget\_details\_onkar.g\_price is 'It contains price of particular gadget';

select \* from user\_tab\_comments where lower(table\_name) ='gadget\_details\_onkar';

select \* from user\_col\_comments where lower(table\_name) ='gadget\_details\_onkar';

truncate table gadget\_details\_onkar; /\* Truncate \*/





drop table gadget\_details\_onkar;

select \* from gadget\_details\_onkar;