i2i Systems
innovation to integration

i2i Academy

Training Document

Topic	Oracle SQL Language Fundamentals I
Document Name	SQL02-EX-01-05

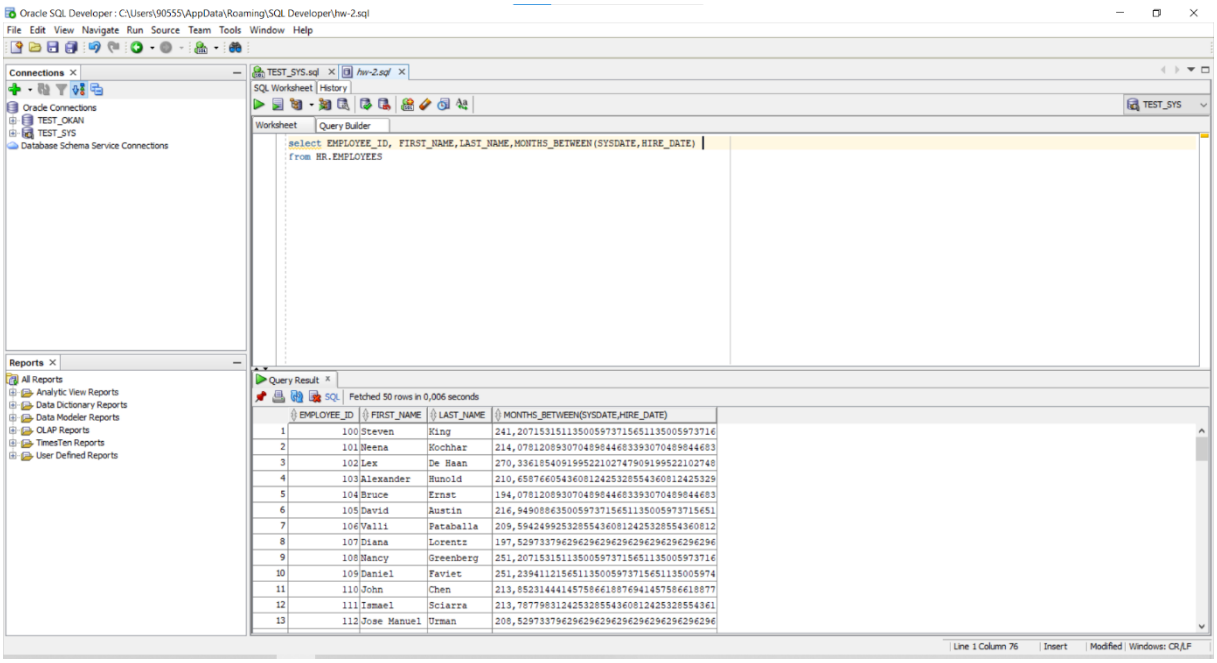
Exercise SQL02-EX-01:

Definiton : Write an SQL query that selects employee's id, employee's first name, employee's last name and employee's **number of months** from hire_date to today for all employees. (Hint:MONTHS_BETWEEN)

SQL:

```
SELECT EMPLOYEE_ID,

FIRST_NAME,

LAST_NAME,

MONTHS_BETWEEN(SYSDATE,HIRE_DATE)

FROM HR.EMPLOYEES
```

Screenshot:



Exercise SQL02-EX-02:

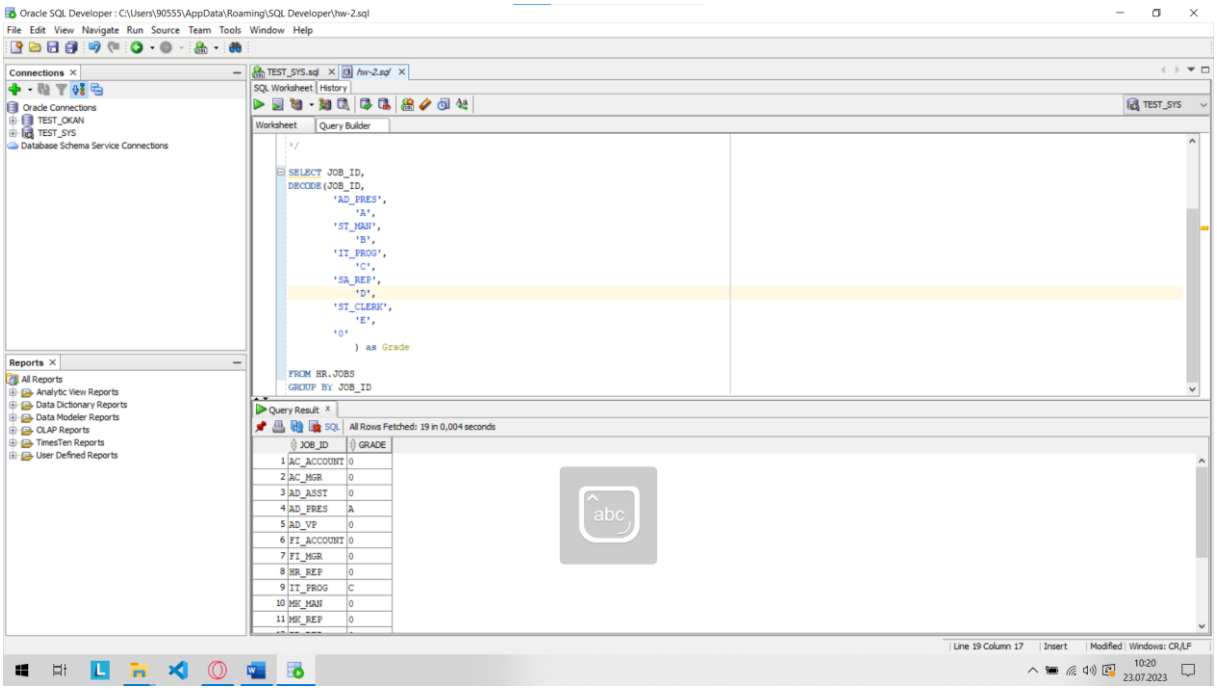
Definiton : Write a query that displays the grade of all employees based on the value of the column JOB_ID, using the following data: (Use DECODE)

Job	Grade
AD_PRES	A
ST_MAN	B
IT_PROG	C
SA_REP	D
ST_CLERK	E
None of the above	0

SQL:

```
SELECT JOB_ID,

DECODE(JOB_ID,

    'AD_PRES',

      'A',

    'ST_MAN',

      'B',

    'IT_PROG',

      'C',

    'SA_REP',

      'D',

    'ST_CLERK',

      'E',

    '0'

      ) as Grade

FROM HR.JOBS

GROUP BY JOB_ID
```

Screenshot:



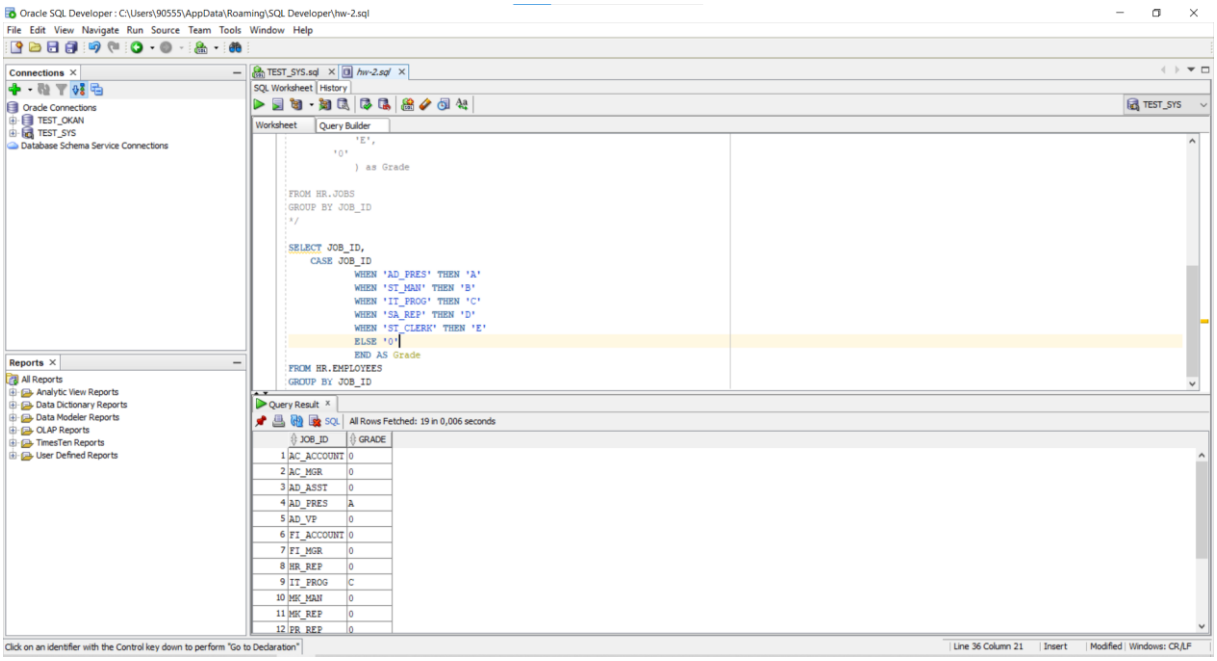
Exercise SQL02-EX-03:

Definiton : Write a query for SQL02-EX-02(previous question) with using **CASE WHEN.**

SQL:

```
SELECT JOB_ID,
   CASE JOB_ID
        WHEN 'AD_PRES' THEN 'A'
        WHEN 'ST_MAN' THEN 'B'
        WHEN 'IT_PROG' THEN 'C'
        WHEN 'SA_REP' THEN 'D'
        WHEN 'ST_CLERK' THEN 'E'
        ELSE '0'
        END AS Grade
FROM HR.EMPLOYEES
GROUP BY JOB_ID
```

Screenshot:


Oracle SQL Developer : C:\Users\90555\AppData\Roaming\SQL Developer\hw-2.sql
File Edit View Navigate Run Source Team Tools Window Help
Connections
Oracle Connections
TEST_OKAN
TEST_SYS
Database Schema Service Connections
Reports
All Reports
Analytic View Reports
Data Dictionary Reports
Data Modeler Reports
OLAP Reports
TimesTen Reports
User Defined Reports
TEST_SYS.sql
hw-2.sql
SQL Worksheet
History
Worksheet
Query Builder
'E',
'0'
) as Grade
FROM HR.JOBS
GROUP BY JOB_ID
*/
SELECT JOB_ID,
CASE JOB_ID
WHEN 'AD_PRES' THEN 'A'
WHEN 'ST_MAN' THEN 'B'
WHEN 'IT_PROG' THEN 'C'
WHEN 'SA_REP' THEN 'D'
WHEN 'ST_CLERK' THEN 'E'
ELSE '0'
END AS Grade
FROM HR.EMPLOYEES
GROUP BY JOB_ID
Query Result
All Rows Fetched: 19 in 0,006 seconds
JOB_ID GRADE
1 AC_ACCOUNT 0
2 AC_MGR 0
3 AD_ASST 0
4 AD_PRES A
5 AD_VP 0
6 FI_ACCOUNT 0
7 FI_MGR 0
8 HR_REP 0
9 IT_PROG C
10 MK_MAN 0
11 MK_REP 0
12 PR_REP 0
Click on an identifier with the Control key down to perform "Go to Declaration"
Line 36 Column 21
Insert
Modified
Windows: CR/LF

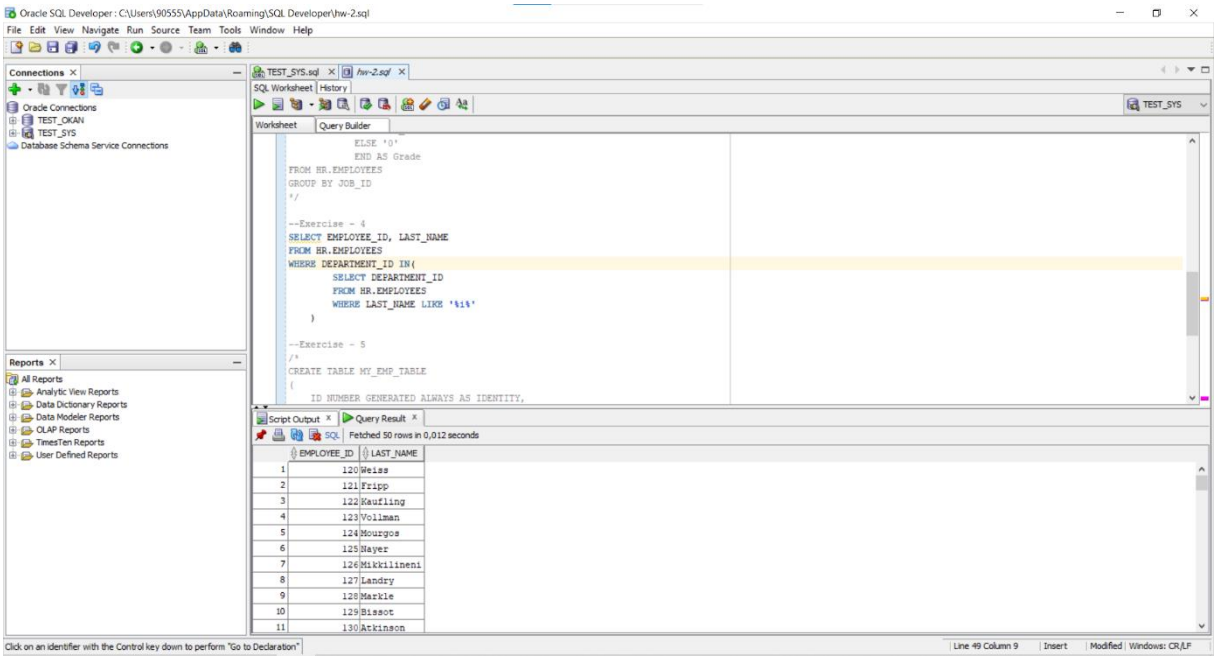
Exercise SQL02-EX-04:

Definiton : Write a query that displays the employee number and last name of all employees who work in a department with any employee whose last name contains a “i”.

SQL:

```
SELECT EMPLOYEE_ID, LAST_NAME

FROM HR.EMPLOYEES

WHERE DEPARTMENT_ID IN(

    SELECT DEPARTMENT_ID

    FROM HR.EMPLOYEES

    WHERE LAST_NAME LIKE '%i%'

)
```

Screenshot:



Exercise SQL02-EX-05:

Definiton :

- Create a table for MY_EMP_TABLE with following columns
- Insert following rows,
- Update salary with 1.10 times of salary value
- Delete rows which first_name is David
- Truncate table.

ID	LAST_NAME	FIRST_NAME	SALARY
1	Black	John	1100
2	White	Kent	1300
3	Orange	David	1700
4	Pink	Alissa	1900

SQL:

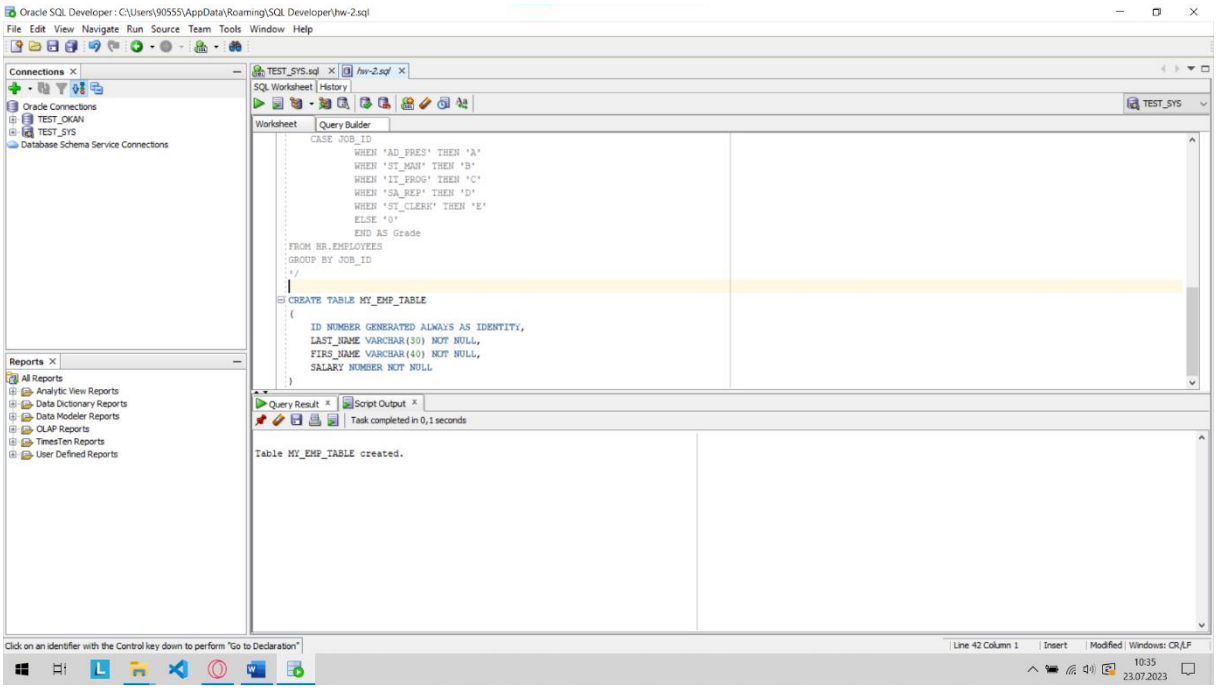
```
CREATE TABLE MY_EMP_TABLE
(
   ID NUMBER GENERATED ALWAYS AS IDENTITY,
   LAST_NAME VARCHAR(30) NOT NULL,
   FIRS_NAME VARCHAR(40) NOT NULL,
   SALARY NUMBER NOT NULL
)
INSERT INTO MY_EMP_TABLE (LAST_NAME, FIRST_NAME, SALARY)
VALUES ('Black','John',1100),
     ('White','Kent',1300),
     ('Orange','Devid',1700);
```

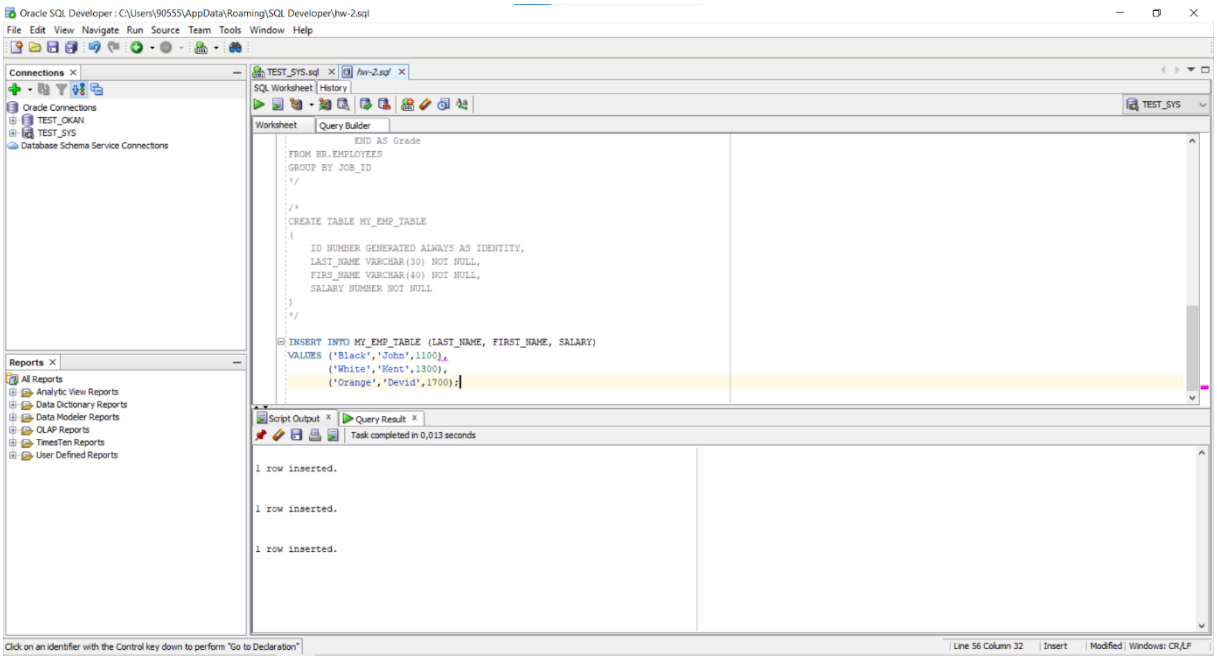
UPDATE MY_EMP_TABLE SET SALARY = SALARY * 1.10 WHERE ID=2

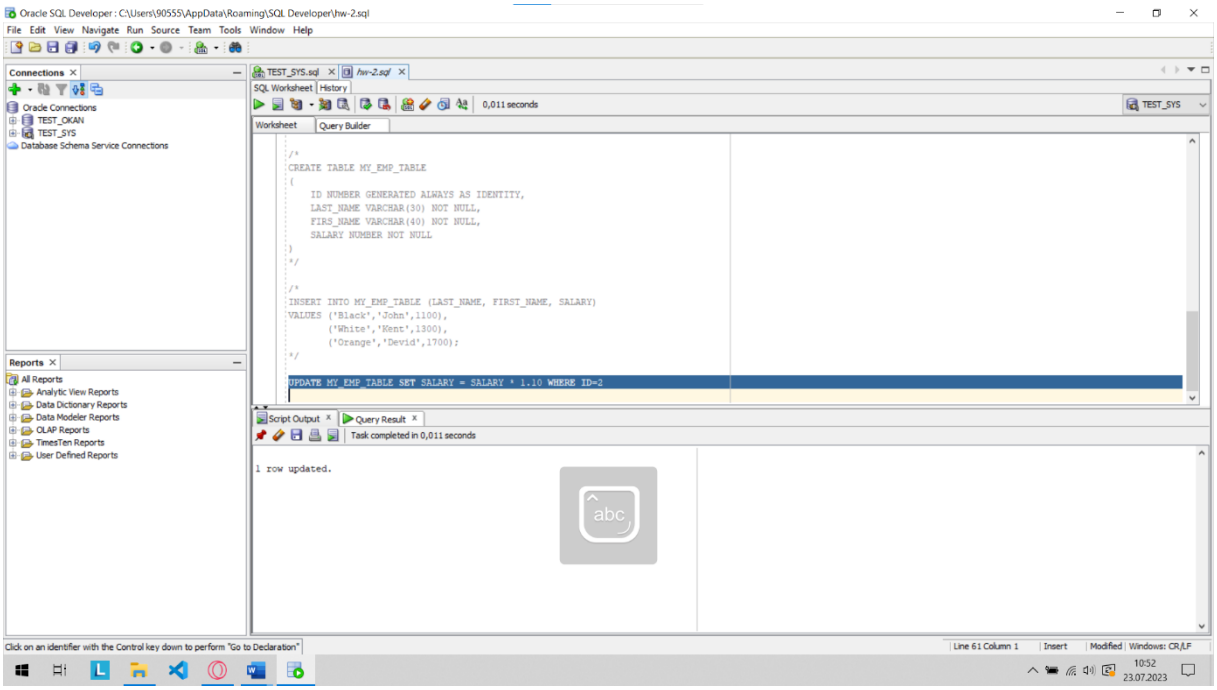
DELETE FROM MY_EMP_TABLE WHERE FIRST_NAME = 'Devid'

DROP TABLE MY_EMP_TABLE

Screenshot:






Oracle SQL Developer : C:\Users\90555\AppData\Roaming\SQL Developer\hw-2.sql
File Edit View Navigate Run Source Team Tools Window Help
Connections
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TEST_OKAN
TEST_SYS
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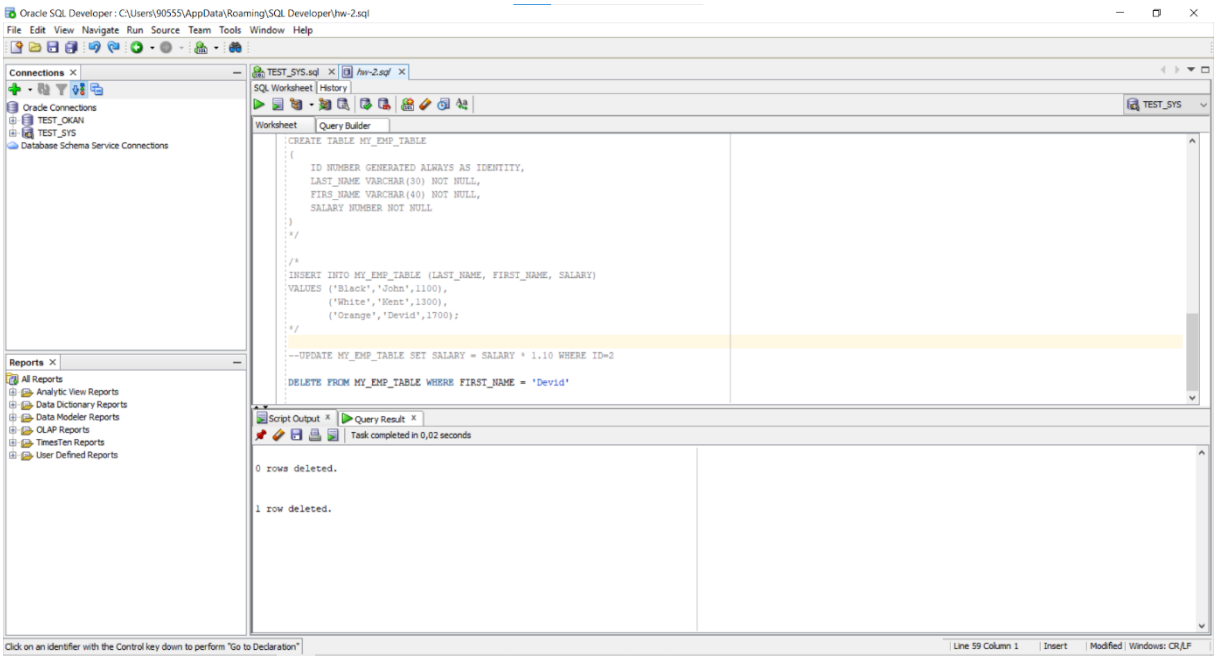
TEST_SYS.sql
hw-2.sql
SQL Worksheet
History
0,011 seconds
TEST_SYS
Worksheet
Query Builder
/*
CREATE TABLE MY_EMP_TABLE
(
ID NUMBER GENERATED ALWAYS AS IDENTITY,
LAST_NAME VARCHAR(30) NOT NULL,
FIRS_NAME VARCHAR(40) NOT NULL,
SALARY NUMBER NOT NULL
)
*/
/*
INSERT INTO MY_EMP_TABLE (LAST_NAME, FIRST_NAME, SALARY)
VALUES ('Black','John',1100),
('White','Kent',1300),
('Orange','Devid',1700);
*/
UPDATE MY_EMP_TABLE SET SALARY = SALARY * 1.10 WHERE ID=2
Script Output
Query Result
Task completed in 0,011 seconds
1 row updated.
Click on an identifier with the Control key down to perform "Go to Declaration"
Line 61 Column 1
Insert
Modified
Windows: CR/LF
10:52
23.07.2023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SALARY NUMBER NOT NULL
)
*/
/*
INSERT INTO MY_EMP_TABLE (LAST_NAME, FIRST_NAME, SALARY)
VALUES ('Black','John',1100),
('White','Kent',1300),
('Orange','Devid',1700);
*/
--UPDATE MY_EMP_TABLE SET SALARY = SALARY * 1.10 WHERE ID=2
DELETE FROM MY_EMP_TABLE WHERE FIRST_NAME = 'Devid'
Script Output
Query Result
Task completed in 0,02 seconds
0 rows deleted.
1 row deleted.
Click on an identifier with the Control key down to perform "Go to Declaration"
Line 59 Column 1
Insert
Modified
Windows: CR/LF