5420 Assignment-2-Team-19

SQL Workspace name: tejasviworkspace

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The “CreateTables.sql” and “InsertRecords.sql“ scripts have been uploaded and executed successfully in Oracle Apex workspace.

The various SQL code(s) for the respective scenarios in the questions are mentioned below.

**Query 01:**

select \* from DEMO\_CLASSROOM;

**Result:**

|  |  |  |
| --- | --- | --- |
| CRID | DESCR | CAP |
| BA 116 | BA 116 | 220 |
| BA 250 | BA 250 | 40 |
| BA 356 | BA 356 | 50 |
| BO 115 | Biology 115 | 70 |
| CR 204 | Curry 204 | 110 |
| CR 205 | Curry 205 | 110 |
| CR 121 | Computer Science 212 | 50 |
| LA 200 | Language 200 | 65 |
| MU 245 | Music 245 | 50 |
| PH 110 | Physics 110 | 250 |

10 rows returned in 0.04 seconds

Select \* from DEMO\_REGISTRATION;

**Result:**

|  |  |  |  |
| --- | --- | --- | --- |
| RID | SID | CID | |
| R01 | S01 | C03 | |
| R02 | S02 | C03 | |
| R03 | S02 | C06 | |
| R04 | S03 | C01 | |
| R05 | S03 | C06 | |
| R06 | S03 | C07 | |
| R07 | S04 | C01 | |
| R08 | S04 | C03 | |
| R09 | S04 | C07 | |
| R10 | S05 | C06 | |
| R11 | S05 | C07 | |
| R12 | S06 | C02 | |
| R13 | S06 | C06 | |
| R14 | S07 | C06 | |
| R15 | S07 | C07 | |
| R16 | S08 | C03 | |
| R17 | S08 | C05 | |
| R18 | S09 | C02 | |
| R19 | S09 | C05 | |
| R20 | S09 | C07 | |
| R21 | S01 | C08 | |
| R22 | S02 | C09 | |
| R23 | S05 | C08 | |
| R24 | S06 | C09 | |
| R25 | S01 | C09 | |
| 25 rows returned in 0.00 seconds | |  |

Select \* from DEMO\_COURSE;

**Result:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| CID | TITLE | IID | HOUR | CRID |
| C01 | Introduction to Business | I01 | 3 | BA 116 |
| C02 | Introduction to Business | I06 | 3 | CR 204 |
| C03 | Business Communications | I03 | 3 | CR 205 |
| C04 | Business Ethics | I01 | 2 | BA 356 |
| C05 | Economic Policies | I06 | 2 | BO 115 |
| C06 | Computer Programming | I02 | 3 | CR 121 |
| C07 | Statistics | I04 | 3 | PH 110 |
| C08 | Database | I05 | 3 | BA 356 |
| C09 | Java | I02 | 3 | BA 250 |

|  |  |
| --- | --- |
| 9 rows returned in 0.03 seconds |  |

Select \* from DEMO\_INSTRUCTOR;

**Result:**

|  |  |  |
| --- | --- | --- |
| IID | NAME | DEPT |
| I01 | Becker | BCIS |
| I02 | Lee | Computer |
| I03 | Ferguson | English |
| I04 | Harvey | Statisitics |
| I05 | Koh | BCIS |
| I06 | Kent | Economics |

|  |  |
| --- | --- |
| 6 rows returned in 0.03 seconds |  |

Select \* from DEMO\_STUDENT;

**Result:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| SID | NAME | MAJOR | YEAR | GPA |
| S01 | Bird | Philosophy | 2 | 3.5 |
| S02 | Austin | English | 2 | 3.7 |
| S03 | Scott | Statistics | 3 | 2.5 |
| S04 | Coleman | Business | 1 | 1.4 |
| S05 | Jefferson |  | 2 | 1.8 |
| S06 | Newsome | Business | 1 | 2.9 |
| S07 | Hampton | Computer | 2 | 2.4 |
| S08 | Hartman | Business | 1 | 3.2 |
| S09 | Jones | Computer | 4 | 3.9 |
| S10 | Oldham | Business | 1 | 3 |

10 rows returned in 0.03 seconds

**Query 02:**

select NAME, YEAR, GPA from DEMO\_STUDENT where MAJOR = ‘Business’

order by YEAR desc;

**Result:**

|  |  |  |
| --- | --- | --- |
| **NAME** | **YEAR** | **GPA** |
| Coleman | 1 | 1.4 |
| Oldham | 1 | 3 |
| Hartman | 1 | 3.2 |
| Newsome | 1 | 2.9 |
|  |  |  |

**Query 03:**

select CID, TITLE, CRID from DEMO\_COURSE WHERE IID=’I06’;

**Result:**

|  |  |  |
| --- | --- | --- |
| **CID** | **TITLE** | **CRID** |
| C02 | Introduction to Business | CR 204 |
| C05 | Economic Policies | BO 115 |
|  |  |  |

2 rows returned in 0.01 seconds

**Query 04**:

select DEMO\_COURSE.CID, DEMO\_COURSE.TITLE, DEMO\_CLASSROOM.CAP, DEMO\_CLASSROOM.DESCR from DEMO\_COURSE

INNER JOIN DEMO\_CLASSROOM ON DEMO\_CLASSROOM.CRID = DEMO\_COURSE.CRID

Where DEMO\_CLASSROOM.DESCR = ‘Curry 205’;

**Result:**

|  |  |  |  |
| --- | --- | --- | --- |
| **CID** | **TITLE** | **CAP** | **DESCR** |
| C03 | Business Communications | 110 | Curry 205 |

1 rows returned in 0.04 seconds

**Query 05:**

Select IID, COUNT IID from DEMO\_COURSE GROUP BY IID having COUNT (IID)>1;

**Result:**

|  |  |  |
| --- | --- | --- |
| **IID** |  | **COUNT(IID)** |
| I06 |  | 2 |
| I02 |  | 2 |
| I01 |  | 2 |

3 rows returned in 0.00 seconds

**Query 06:**

Select \* from DEMO\_COURSE where IID In

(select IID from DEMO\_COURSE

group by IID

having Count (IID) >1) and (TITLE like '%Business%') or (HOUR <= 2);

**Result:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| CID | TITLE | IID | HOUR | CRID |
| C01 | Introduction to Business | I01 | 3 | BA 116 |
| C02 | Introduction to Business | I06 | 3 | CR 204 |
| C04 | Business Ethics | I01 | 2 | BA 356 |
| C05 | Economic Policies | I06 | 2 | BO 115 |

4 rows returned in 0.03 seconds

**Query 07**:

SELECT DEMO\_INSTRUCTOR.NAME, DEMO\_INSTRUCTOR.DEPT FROM DEMO\_COURSE

INNER JOIN DEMO\_INSTRUCTOR ON DEMO\_COURSE.IID = DEMO\_INSTRUCTOR.IID

GROUP BY DEMO\_COURSE.IID, DEMO\_INSTRUCTOR.IID, DEMO\_INSTRUCTOR.NAME, DEMO\_INSTRUCTOR.DEPT

HAVING COUNT (DEMO\_COURSE.IID) = 1;

**Result:**

|  |  |
| --- | --- |
| **NAME** | **DEPT** |
| Ferguson | English |
| Koh | BCIS |
| Harvey | Statisitics |

3 rows returned in 0.05 seconds

**Query** **08**:

SELECT CID, COUNT(SID) AS STUDENTCOUNT FROM DEMO\_REGISTRATION GROUP BY CID;

**Result:**

|  |  |
| --- | --- |
| **CID** | **STUDENTCOUNT** |
| C05 | 2 |
| C08 | 2 |
| C06 | 5 |
| C01 | 2 |
| C03 | 4 |
| C02 | 2 |
| C07 | 5 |
| C09 | 3 |
|  |  |

8 rows returned in 0.04 seconds

**Query 09:**

Select \* from demo\_course where CID in

(Select CID from demo\_registration group by CID having count (CID) > 4);

**Result:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **CID** | **TITLE** | **IID** | **HOUR** | **CRID** |
| C06 | Computer Programming | I02 | 3 | CR 121 |
| C07 | Statistics | I04 | 3 | PH 110 |

2 rows returned in 0.03 seconds

**Query 10:**

Select \* from DEMO\_CLASSROOM where CAP IN

(select CAP from DEMO\_CLASSROOM group by CAP having count(CAP)>1)

AND CRID != DESCR;

**Result:**

|  |  |  |
| --- | --- | --- |
| CRID | DESCR | CAP |
| CR 121 | Computer Science 212 | 50 |
| CR 205 | Curry 205 | 110 |
| CR 204 | Curry 204 | 110 |
| MU 245 | Music 245 | 50 |

4 rows returned in 0.02 seconds

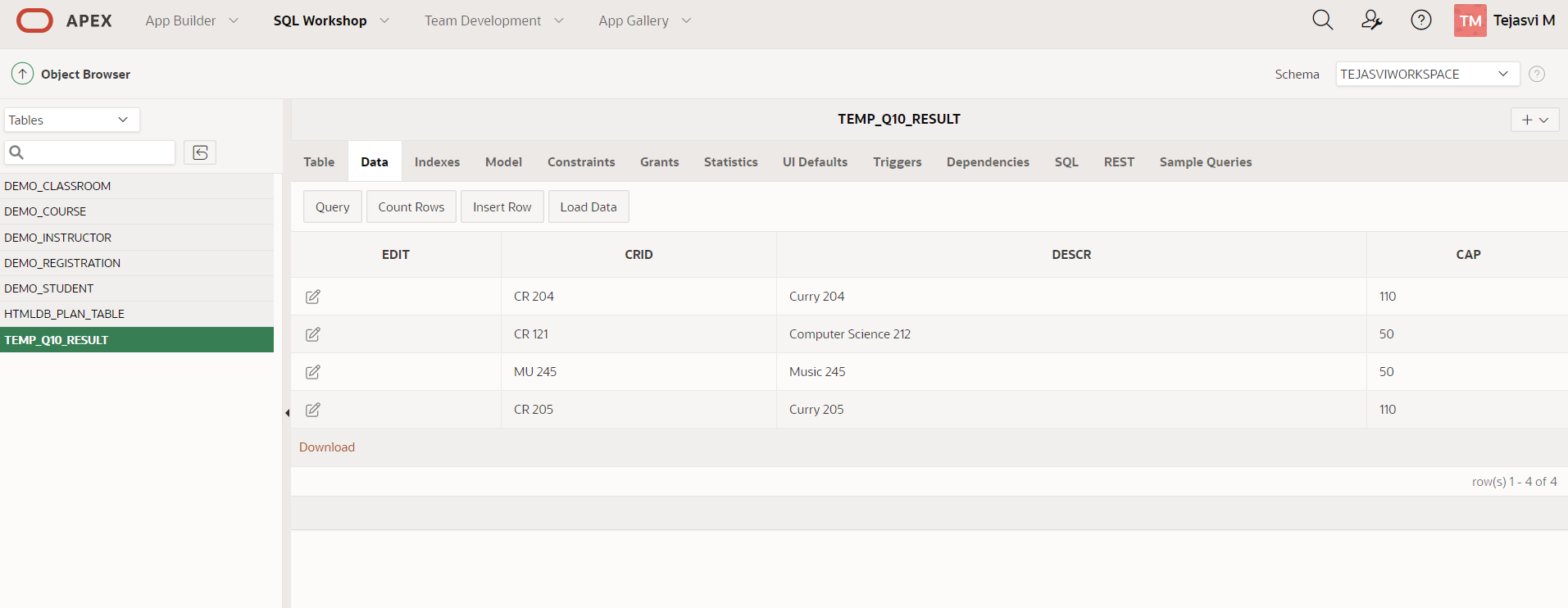
**Query 11:**

CREATE TABLE Temp\_Q10\_Result AS (Select \* from DEMO\_CLASSROOM where CAP IN

(select CAP from DEMO\_CLASSROOM group by CAP having count(CAP)>1)

AND CRID != DESCR);

**Result:**



**Query 12**:

SELECT DISTINCT YEAR, AVG(GPA) FROM DEMO\_STUDENT GROUP BY YEAR ORDER BY YEAR ASC;

**Result:**

|  |  |
| --- | --- |
| **YEAR** | **AVG(GPA)** |
| 1 | 2.625 |
| 2 | 2.85 |
| 3 | 2.5 |
| 4 | 3.9 |

4 rows returned in 0.01 seconds

**Query 13:**

SELECT DISTINCT YEAR, AVG (GPA), ROW\_NUMBER() OVER (ORDER BY AVG (GPA) ASC) ROWNUMBER FROM DEMO\_STUDENT GROUP BY AVG(GPA) ASC;

**Result:**

|  |  |  |
| --- | --- | --- |
| **YEAR** | **AVG(GPA)** | **ROWNUMBER** |
| 3 | 2.5 | 1 |
| 1 | 2.625 | 2 |
| 2 | 2.85 | 3 |
| 4 | 3.9 | 4 |

4 rows returned in 0.01 seconds

**Query 14:**

Select YEAR, AvgGPA from(

select YEAR, AVG(GPA) as AvgGPA, Row\_number() over (order by AVG(GPA)) as rownumber from DEMO\_STUDENT

group by YEAR

order by rownumber) X where rownumber =1;

**Result:**

|  |  |
| --- | --- |
| YEAR | AVGGPA |
|  |  |
| 3 | 2.5 |

1 rows returned in 0.01 seconds

**Query 15:**

SELECT \* FROM DEMO\_STUDENT WHERE YEAR = ‘1’ AND GPA < 2;

**Result:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **SID** | **NAME** | **MAJOR** | **YEAR** | **GPA** |
| S04 | Coleman | Business | 1 | 1.4 |

1 rows returned in 0.00 seconds

**Query 16**:

SELECT DEMO\_REGISTRATION.SID, DEMO\_REGISTRATION.CID FROM DEMO\_REGISTRATION

INNER JOIN DEMO\_STUDENT ON DEMO\_REGISTRATION.SID = DEMO\_STUDENT.SID

WHERE DEMO\_STUDENT.MAJOR = ‘COMPUTER’;

**Result:**

|  |  |  |
| --- | --- | --- |
| **SID** |  | **CID** |
| S07 |  | C06 |
| S07 |  | C07 |
| S09 |  | C02 |
| S09 |  | C05 |
| S09 |  | C07 |

5 rows returned in 0.01 seconds

**Query 17:**

SELECT DEMO\_COURSE.CID, DEMO\_COURSE.TITLE, DEMO\_COURSE.IID, DEMO\_COURSE.HOUR, DEMO\_COURSE.CRID FROM DEMO\_COURSE

INNER JOIN DEMO\_REGISTRATION ON DEMO\_REGISTRATION.CID =DEMO\_COURSE.CID

INNER JOIN DEMO\_STUDENT ON DEMO\_STUDENT.SID = DEMO\_REGISTRATION.SID

WHERE DEMO\_STUDENT.MAJOR = ‘COMPUTER’;

**Result:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **CID** | **TITLE** | **IID** | **HOUR** | **CRID** |
| C02 | Introduction to Business | I06 | 3 | CR 204 |
| C05 | Economic Policies | I06 | 2 | BO 115 |
| C06 | Computer Programming | I02 | 3 | CR 121 |
| C07 | Statistics | I04 | 3 | PH 110 |
| C07 | Statistics | I04 | 3 | PH 110 |

5 rows returned in 0.02 seconds

Graphical user interface, text

Description automatically generated

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