**Part II-C**

SQL> SET ECHO ON

SQL> START C:\DBM\SQL\_PRJ\_PART3.txt

SQL> set pagesize 80

SQL> set linesize 200

SQL> CREATE OR REPLACE VIEW emp\_report

2 AS

3 SELECT e.emp\_num||' - '||e.emp\_first||' '||e.emp\_last AS "Employee",

4 s.emp\_num||' - '||s.emp\_first||' '||s.emp\_last AS "Supervisor",

5 name AS "Training", date\_acquired, description AS "Skill",

6 NVL(M,0) AS "Months"

7 FROM employee e JOIN employee s ON e.super\_id = s.emp\_num

8 LEFT OUTER JOIN(SELECT emp\_num, name, date\_acquired, code, description,

9 ROUND(MONTHS\_BETWEEN(SYSDATE, date\_acquired), 0) AS M

10 FROM training JOIN skill USING (code)) t ON e.emp\_num = t.emp\_num

11 ORDER BY e.emp\_num DESC;

View created.

SQL> REM "Information Report" created on December 03 2017

SQL> REM by user SQL

SQL>

SQL> REM set up the appropriate parameters to increase readability

SQL> COLUMN employee FORMAT A27

SQL> COLUMN supervisor FORMAT A27

SQL> COLUMN training FORMAT A27 -

> NULL 'No training yet'

SQL> COLUMN skill HEADING 'Skill|Obtained' FORMAT A40 -

> NULL 'No training yet'

SQL> COLUMN date\_acquired HEADING 'Date|Acquired' FORMAT A18 -

> NULL 'No data'

SQL> BREAK ON employee ON supervisor

SQL> TTITLE 'Information Report'

SQL> BTITLE CENTER 'End of Information Report' -

> RIGHT 'Run By: ' SQL.USER FORMAT A8

SQL> COMPUTE COUNT LABEL 'Number of trainings' -

> OF training ON employee

SQL>

SQL> SELECT \* FROM emp\_report;

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Information Report

Date Skill

Employee Supervisor Training Acquired Obtained Months

--------------------------- --------------------------- --------------------------- ------------------ ---------------------------------------- ----------

404 - William Chan 400 - Amelia Jones No training yet No data No training yet 0

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* ---------------------------

Number of trainings 0

403 - Michelle Hsu 400 - Amelia Jones Profession Speaking 05-DEC-06 Effective Communication 132

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* ---------------------------

Number of trainings 1

401 - Scott Harris 400 - Amelia Jones No training yet No data No training yet 0

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* ---------------------------

Number of trainings 0

321 - Mayer John 313 - Jill Bertram Finance Workshop 08-NOV-17 Financial Statements Analysis 1

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* ---------------------------

Number of trainings 1

320 - Tina Duncan 168 - Chris Corman Web Develop 14-MAY-17 Web Application 7

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* ---------------------------

Number of trainings 1

319 - Amy Lin 316 - Mary Whitestar Communication 29-MAR-17 Effective Communication 8

Speaking Training 23-SEP-16 Effective Communication 14

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* ---------------------------

Number of trainings 2

318 - Jack Johnson 315 - Howard Wheeler No training yet No data No training yet 0

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* ---------------------------

Number of trainings 0

317 - Steve Newton 316 - Mary Whitestar Speaking 01-DEC-16 Effective Communication 12

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* ---------------------------

Number of trainings 1

316 - Mary Whitestar 315 - Howard Wheeler No training yet No data No training yet 0

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* ---------------------------

Number of trainings 0

315 - Howard Wheeler 400 - Amelia Jones No training yet No data No training yet 0

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* ---------------------------

Number of trainings 0

314 - Bob Gates 313 - Jill Bertram Finance Training 11-JUN-15 Financial Statements Analysis 30

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* ---------------------------

Number of trainings 1

313 - Jill Bertram 312 - Henry Carter Finance Training 11-JUN-15 Financial Statements Analysis 30

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* ---------------------------

Number of trainings 1

312 - Henry Carter 173 - Kelly Milton No training yet No data No training yet 0

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* ---------------------------

Number of trainings 0

225 - Stan Evans 401 - Scott Harris Marketing 24-DEC-07 Marketing Strategy 119

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* ---------------------------

Number of trainings 1

214 - Ana Ramos 203 - Bill Getz No training yet No data No training yet 0

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* ---------------------------

Number of trainings 0

End of Information Report

Run By: SQL\_PRJ\_1

Wed Dec 06 page 2

Information Report

Date Skill

Employee Supervisor Training Acquired Obtained Months

--------------------------- --------------------------- --------------------------- ------------------ ---------------------------------------- ----------

203 - Bill Getz 401 - Scott Harris Marketing 24-DEC-07 Marketing Strategy 119

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* ---------------------------

Number of trainings 1

173 - Kelly Milton 172 - Lisa Swift No training yet No data No training yet 0

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* ---------------------------

Number of trainings 0

172 - Lisa Swift 400 - Amelia Jones No training yet No data No training yet 0

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* ---------------------------

Number of trainings 0

171 - Willam Belli 168 - Chris Corman Database Management 09-JAN-14 SQL Application 47

OOP in Java 04-MAY-13 Java Application 55

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* ---------------------------

Number of trainings 2

168 - Chris Corman 137 - Jim Hall JAVA Workshop 12-JUL-16 Big Data Application 17

OOP in Java 07-DEC-12 Java Application 60

Database Management 09-JAN-14 SQL Application 47

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* ---------------------------

Number of trainings 3

162 - Ray Nelson 128 - Pat Boon OOP in Java 15-MAY-14 Java Application 43

Data Visuallization 28-APR-14 Big Data Application 43

Text Analytics 03-DEC-12 Data Mining Techniques 60

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* ---------------------------

Number of trainings 3

153 - Adam Roditi 400 - Amelia Jones Hadoop and MapReduce 20-DEC-13 Big Data Application 48

Advanced SQL 07-AUG-13 SQL Application 52

Data Mining Workshop 12-DEC-10 Data Mining Techniques 84

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* ---------------------------

Number of trainings 3

137 - Jim Hall 153 - Adam Roditi Data Mining Workshop 06-AUG-12 Big Data Application 64

Data Focus Python 02-MAY-09 Python Application 103

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* ---------------------------

Number of trainings 2

128 - Pat Boon 153 - Adam Roditi Data Focus Python 12-DEC-10 Python Application 84

Hadoop and MapReduce 20-DEC-13 Big Data Application 48

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* ---------------------------

Number of trainings 2

100 - Mary Krall 203 - Bill Getz Business Negotiation 05-JUL-13 Negotiation Strategy 53

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* ---------------------------

Number of trainings 1

End of Information Report Run By: SQL\_PRJ\_1

35 rows selected.

SQL> BREAK ON Table\_Name ON Column\_Name

SQL> COLUMN constraint\_name format a26

SQL> column table\_name format a20

SQL> column column\_name format a20

SQL> Column TYPE format A4

SQL> column Search\_Condition format a28

SQL> column Reference\_Table format a20

SQL> column Reference\_Column format a20

SQL> COLUMN constraint\_name FORMAT A25

SQL> COLUMN table\_name FORMAT  A20

SQL> COLUMN column\_name FORMAT A15

SQL> COLUMN type FORMAT  A4

SQL> COLUMN search\_condition  FORMAT A20

SQL> COLUMN reference\_table FORMAT A18

SQL> COLUMN reference\_column  FORMAT A18

SQL> BREAK ON table\_name ON column\_name

SQL> SELECT user\_tables.table\_name, user\_tab\_columns.column\_name, q.constraint\_name,

 2       CASE user\_constraints.constraint\_type

 3       WHEN 'P' THEN 'PK'

 4       WHEN 'R' THEN 'FK'

 5       WHEN 'C' THEN 'CK'

 6       WHEN 'U' THEN 'UK'

 7       ELSE constraint\_type

 8       END AS "Type", w.search\_condition AS search\_condition, t. table\_name as  reference\_table, t.column\_name as reference\_column

 9  FROM  user\_tables JOIN user\_tab\_columns

10    ON(user\_tables.table\_name = user\_tab\_columns.table\_name)

11   LEFT OUTER JOIN ( SELECT constraint\_name, table\_name, column\_name

12   user\_cons\_columns) q

13   ON (user\_tables.table\_name =q.table\_name AND  user\_tab\_columns.column\_name =  q.column\_name)

14     LEFT OUTER JOIN user\_constraints

15   ON (user\_constraints.constraint\_name = q.constraint\_name)

16   LEFT OUTER JOIN(SELECT constraint\_name, search\_condition

17        FROM user\_constraints

18   WHERE constraint\_type = 'C') w

19   ON (w.constraint\_name =  q.constraint\_name)

20     LEFT OUTER JOIN(SELECT  constraint\_name, table\_name, column\_name

21   FROM user\_cons\_columns) t

22   ON (user\_constraints .r\_constraint\_name= t.constraint\_name)

23  ORDER BY user\_tables.table\_name, user\_tab\_columns.column\_id;

Wed Dec 06 page 1

Information Report

TABLE\_NAME COLUMN\_NAME CONSTRAINT\_NAME Type SEARCH\_CONDITION REFERENCE\_TABLE REFERENCE\_COLUMN

-------------------- --------------- ------------------------- ---- -------------------- ------------------ ------------------

ASSIGNMENT ASSIGN\_NUM ASSIGNMENT\_ASSIGNNUM\_PK PK

PROJ\_NUMBER ASSIGNMENT\_PROJECTNUM\_FK FK PROJECT PROJ\_NUMBER

EMP\_NUM ASSIGNMENT\_EMPNUM\_FK FK EMPLOYEE EMP\_NUM

DATE\_ASSIGNED ASSIGNMENT\_DATERANGE\_CK CK (Date\_Ended- Date\_As

signed) <= 31

ASSIGNMENT\_HOURSUSED\_CK CK ((Date\_Ended- Date\_A

ssigned)\*24) >= Hour

s\_Used

ASSIGNMENT\_DATEENDED\_CK CK Date\_Ended >= Date\_

Assigned

DATE\_ENDED ASSIGNMENT\_DATERANGE\_CK CK (Date\_Ended- Date\_As

signed) <= 31

ASSIGNMENT\_HOURSUSED\_CK CK ((Date\_Ended- Date\_A

ssigned)\*24) >= Hour

s\_Used

ASSIGNMENT\_DATEENDED\_CK CK Date\_Ended >= Date\_

Assigned

HOURS\_USED ASSIGNMENT\_HOURSUSED\_CK CK ((Date\_Ended- Date\_A

ssigned)\*24) >= Hour

s\_Used

CLIENT CLIENT\_ID CLIENT\_CLIENTID\_PK PK

NAME

STREET

CITY

STATE

ZIP\_CODE

INDUSTRY

WEB\_ADDRESS

PHONE

CONTACT\_NAME

DEPARTMENT DEPT\_CODE DEPARTMENT\_DEPTCODE\_PK PK

NAME

LOCATION

PHONE

MANAGER\_ID DEPARTMENT\_MANAGERID\_FK FK EMPLOYEE EMP\_NUM

EMPLOYEE EMP\_NUM EMPLOYEE\_EMPNUM\_PK PK

CHECK\_SUPERID CK Emp\_Num <> Super\_ID

EMP\_LAST

EMP\_FIRST

DOB CHECK\_DOB CK MONTHS\_BETWEEN(Hire\_

Date, DOB) > 204 AND

End of Information Report Run By: SQL\_PRJ\_1

Wed Dec 06 page 2

Employee Information

TABLE\_NAME COLUMN\_NAME CONSTRAINT\_NAME Type SEARCH\_CONDITION REFERENCE\_TABLE REFERENCE\_COLUMN

-------------------- --------------- ------------------------- ---- -------------------- ------------------ ------------------

(DOB < Hire\_Date)

EMPLOYEE HIRE\_DATE CHECK\_DOB CK MONTHS\_BETWEEN(Hire\_

Date, DOB) > 204 AND

(DOB < Hire\_Date)

SUPER\_ID EMPLOYEE\_SUPERID\_FK FK EMPLOYEE EMP\_NUM

CHECK\_SUPERID CK Emp\_Num <> Super\_ID

DEPT\_CODE EMPLOYEE\_DEPTCODE\_FK FK DEPARTMENT DEPT\_CODE

PROJECT PROJ\_NUMBER PROJECT\_PROJECTNUM\_PK PK

NAME

START\_DATE

TOTAL\_COST

DEPT\_CODE PROJECT\_DEPTCODE\_FK FK DEPARTMENT DEPT\_CODE

CLIENT\_ID PROJECT\_CLIENTID\_FK FK CLIENT CLIENT\_ID

SKILL CODE SKILL\_CODE\_PK PK

DESCRIPTION

TRAINING TRAIN\_NUM TRAINING\_TRAINNUM\_PK PK

CODE TRAINING\_CODE\_FK FK SKILL CODE

EMP\_NUM TRAINING\_EMPNUM\_FK FK EMPLOYEE EMP\_NUM

DATE\_ACQUIRED

NAME

COMMENTS

End of Information Report

Run By: SQL\_PRJ\_1

48 rows selected.

SQL> SET ECHO OFF

SQL> EXIT