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| Carnegie mellon university australia |
| DB Implementation Project |
| 95-703 Database Management |
| **Group 17** |
| **Celine Patag and Sean Hao**  **cpatag@andrew.cmu.edu**  **xinhao@andrew.cmu.edu** |
| **4/28/2014** |

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# Part III.

## Script #1

ALTER TABLE employee drop constraint employee\_deptcode\_FK;

DROP TABLE training purge;

DROP TABLE assignment purge;

DROP TABLE project purge;

DROP TABLE department purge;

DROP TABLE employee purge;

DROP TABLE client purge;

DROP TABLE skill purge;

CREATE TABLE skill

( Code VARCHAR2(5),

Description VARCHAR2(350),

CONSTRAINT skill\_code\_PK PRIMARY KEY (Code)

);

CREATE TABLE client

( Client\_ID VARCHAR2(4),

Name VARCHAR2(80),

Street VARCHAR2(50),

City VARCHAR2(20),

State VARCHAR2(2),

Zip\_Code VARCHAR2(5),

Industry VARCHAR2(20),

Web\_Address VARCHAR2(80),

Phone VARCHAR2(15),

Contact\_Name VARCHAR(30),

CONSTRAINT client\_clientid\_PK PRIMARY KEY (Client\_ID)

);

CREATE TABLE employee

( Emp\_Num NUMBER(5),

Emp\_Last VARCHAR2(25),

Emp\_First VARCHAR2(25),

Hire\_Date DATE DEFAULT SYSDATE,

DOB DATE,

Super\_ID NUMBER(5),

Dept\_Code VARCHAR2(5),

CONSTRAINT employee\_empnum\_PK PRIMARY KEY (Emp\_Num),

CONSTRAINT employee\_superid\_FK FOREIGN KEY (Super\_ID) REFERENCES Employee (Emp\_Num),

CONSTRAINT employee\_age\_ck check (((hire\_date - DOB)/365) > 17),

CONSTRAINT employee\_supervise\_ck check (super\_id != emp\_num)

);

CREATE TABLE department

( Dept\_Code VARCHAR2(5),

Name VARCHAR2(80),

Location VARCHAR2(50),

Phone VARCHAR2(15),

Manager\_ID NUMBER(5),

CONSTRAINT department\_deptcode\_PK PRIMARY KEY (Dept\_Code),

CONSTRAINT department\_managerid\_FK FOREIGN KEY (Manager\_ID) REFERENCES Employee (Emp\_Num)

);

CREATE TABLE project

( Proj\_Number NUMBER(3),

Name VARCHAR2(200),

Start\_Date DATE DEFAULT SYSDATE,

Total\_Cost NUMBER(30),

Dept\_Code VARCHAR2(5),

Client\_ID VARCHAR2(4),

CONSTRAINT project\_projnumber\_PK PRIMARY KEY (Proj\_Number),

CONSTRAINT project\_deptcode\_FK FOREIGN KEY (Dept\_Code) REFERENCES Department (Dept\_Code),

CONSTRAINT project\_clientid\_FK FOREIGN KEY (Client\_ID) REFERENCES Client (Client\_ID),

CONSTRAINT project\_dept\_admin\_CK check (Dept\_Code != 'ADMIN')

);

CREATE TABLE assignment

( Assign\_Num NUMBER(5),

Proj\_Number NUMBER(5),

Emp\_Num NUMBER(5),

Date\_Assigned DATE DEFAULT SYSDATE,

Date\_Ended DATE,

Hours\_Used NUMBER(5),

CONSTRAINT assignment\_assignnum\_PK PRIMARY KEY (Assign\_Num),

CONSTRAINT assignment\_projectnumber\_FK FOREIGN KEY(Proj\_Number) REFERENCES Project (Proj\_Number),

CONSTRAINT assignment\_empnum\_FK FOREIGN KEY(Emp\_Num) REFERENCES Employee (Emp\_Num),

CONSTRAINT assignment\_endassign\_CK check (Date\_Assigned < Date\_Ended),

CONSTRAINT assignment\_monthproj\_CK unique (date\_ended, proj\_number)

);

CREATE TABLE training

( Train\_Num NUMBER(5),

Code VARCHAR2(5),

Emp\_Num NUMBER(5),

Date\_Acquired DATE,

Name VARCHAR2(80),

Comments VARCHAR2(350),

CONSTRAINT training\_trainnum\_PK PRIMARY KEY (Train\_Num),

CONSTRAINT training\_code\_FK FOREIGN KEY (Code) REFERENCES Skill (Code),

CONSTRAINT training\_empnum\_FK FOREIGN KEY (Emp\_Num) REFERENCES Employee (Emp\_Num)

);

ALTER TABLE EMPLOYEE ADD CONSTRAINT employee\_deptcode\_FK FOREIGN KEY (Dept\_Code) REFERENCES Department (Dept\_Code);

## Script#2

### Skill

Insert into SKILL (CODE,DESCRIPTION) values ('JAVA1','Basic programming with Java');

Insert into SKILL (CODE,DESCRIPTION) values ('JAVA2','Advanced programming with Java');

Insert into SKILL (CODE,DESCRIPTION) values ('J2EE','Java Enterprise Edition - servlets, jsp, servers');

Insert into SKILL (CODE,DESCRIPTION) values ('SQL1','Basic queries using oracle SQL');

Insert into SKILL (CODE,DESCRIPTION) values ('SQL2','Advance qureies using oracle SQL');

Insert into SKILL (CODE,DESCRIPTION) values ('PRJM1','Project management 1 for PMI certification');

Insert into SKILL (CODE,DESCRIPTION) values ('PRJM2','IT Project mangement for PMI certification');

Insert into SKILL (CODE,DESCRIPTION) values ('RUBY','Web development with Ruby on rails');

Insert into SKILL (CODE,DESCRIPTION) values ('PYTHO','Web development with Python');

Insert into SKILL (CODE,DESCRIPTION) values ('MOBDA','Android mobile development');

### Department

Insert into DEPARTMENT (DEPT\_CODE,NAME,LOCATION,PHONE,MANAGER\_ID)

values ('ACCTG','Accounting','Grouger St. Adelaide','(408) 777-9220',null);

Insert into DEPARTMENT (DEPT\_CODE,NAME,LOCATION,PHONE,MANAGER\_ID)

values ('OPRTN','Operations','Bideford St. Clarence Gardens','(674) 290-5550',null);

Insert into DEPARTMENT (DEPT\_CODE,NAME,LOCATION,PHONE,MANAGER\_ID)

values ('ITSUP','IT Support','Osmena Makati City','(273) 961-7241',null);

Insert into DEPARTMENT (DEPT\_CODE,NAME,LOCATION,PHONE,MANAGER\_ID)

values ('HR','Human Resource','Osmena Makati City','(638) 439-5070',null);

Insert into DEPARTMENT (DEPT\_CODE,NAME,LOCATION,PHONE,MANAGER\_ID)

values ('ADMIN','Administration','Victoria Square, Adelaide','(408) 932-8865',null);

### Employee

Insert into EMPLOYEE (EMP\_NUM,EMP\_LAST,EMP\_FIRST,HIRE\_DATE,DOB,SUPER\_ID,DEPT\_CODE)

values (1,'Blankenship','Jin',to\_date('09-APR-19','DD-MON-RR'),

to\_date('16-APR-74','DD-MON-RR'),null,'ADMIN');

Insert into EMPLOYEE (EMP\_NUM,EMP\_LAST,EMP\_FIRST,HIRE\_DATE,DOB,SUPER\_ID,DEPT\_CODE)

values (2,'Bean','Kasimir',to\_date('27-MAR-11','DD-MON-RR'),to\_date('19-FEB-79','DD-MON-RR'),1,'ACCTG');

Insert into EMPLOYEE (EMP\_NUM,EMP\_LAST,EMP\_FIRST,HIRE\_DATE,DOB,SUPER\_ID,DEPT\_CODE)

values (3,'Boyle','Benedict',to\_date('26-MAR-09','DD-MON-RR'),to\_date('28-MAR-63','DD-MON-RR'),1,'OPRTN');

Insert into EMPLOYEE (EMP\_NUM,EMP\_LAST,EMP\_FIRST,HIRE\_DATE,DOB,SUPER\_ID,DEPT\_CODE)

values (4,'Mcgee','Eugenia',to\_date('26-MAR-11','DD-MON-RR'),to\_date('13-JUN-74','DD-MON-RR'),1,'ITSUP');

Insert into EMPLOYEE (EMP\_NUM,EMP\_LAST,EMP\_FIRST,HIRE\_DATE,DOB,SUPER\_ID,DEPT\_CODE)

values (5,'Alford','Brendan',to\_date('17-MAR-11','DD-MON-RR'),to\_date('21-OCT-60','DD-MON-RR'),1,'HR');

Insert into EMPLOYEE (EMP\_NUM,EMP\_LAST,EMP\_FIRST,HIRE\_DATE,DOB,SUPER\_ID,DEPT\_CODE)

values (6,'Estes','Chaim',to\_date('14-MAR-11','DD-MON-RR'),to\_date('22-APR-72','DD-MON-RR'),1,'OPRTN');

Insert into EMPLOYEE (EMP\_NUM,EMP\_LAST,EMP\_FIRST,HIRE\_DATE,DOB,SUPER\_ID,DEPT\_CODE)

values (7,'Sharp','Fuller',to\_date('14-MAR-11','DD-MON-RR'),to\_date('05-JUL-81','DD-MON-RR'),2,'ACCTG');

Insert into EMPLOYEE (EMP\_NUM,EMP\_LAST,EMP\_FIRST,HIRE\_DATE,DOB,SUPER\_ID,DEPT\_CODE)

values (8,'Simon','Maisie',to\_date('09-MAR-11','DD-MON-RR'),to\_date('03-MAY-89','DD-MON-RR'),2,'ACCTG');

Insert into EMPLOYEE (EMP\_NUM,EMP\_LAST,EMP\_FIRST,HIRE\_DATE,DOB,SUPER\_ID,DEPT\_CODE)

values (9,'Baldwin','Sybil',to\_date('14-FEB-09','DD-MON-RR'),to\_date('19-JUN-73','DD-MON-RR'),2,'ACCTG');

Insert into EMPLOYEE (EMP\_NUM,EMP\_LAST,EMP\_FIRST,HIRE\_DATE,DOB,SUPER\_ID,DEPT\_CODE)

values (10,'Brock','Ava',to\_date('06-FEB-11','DD-MON-RR'),to\_date('26-JUN-63','DD-MON-RR'),2,'ACCTG');

Insert into EMPLOYEE (EMP\_NUM,EMP\_LAST,EMP\_FIRST,HIRE\_DATE,DOB,SUPER\_ID,DEPT\_CODE)

values (11,'Matthews','Ori',to\_date('29-JAN-10','DD-MON-RR'),to\_date('11-JUN-72','DD-MON-RR'),2,'ACCTG');

Insert into EMPLOYEE (EMP\_NUM,EMP\_LAST,EMP\_FIRST,HIRE\_DATE,DOB,SUPER\_ID,DEPT\_CODE)

values (12,'Holloway','Wynter',to\_date('16-JAN-13','DD-MON-RR'),to\_date('12-FEB-69','DD-MON-RR'),3,'OPRTN');

Insert into EMPLOYEE (EMP\_NUM,EMP\_LAST,EMP\_FIRST,HIRE\_DATE,DOB,SUPER\_ID,DEPT\_CODE)

values (13,'Swanson','Margaret',to\_date('07-JAN-11','DD-MON-RR'),to\_date('27-SEP-79','DD-MON-RR'),3,'OPRTN');

Insert into EMPLOYEE (EMP\_NUM,EMP\_LAST,EMP\_FIRST,HIRE\_DATE,DOB,SUPER\_ID,DEPT\_CODE)

values (14,'Acevedo','Jolie',to\_date('05-JAN-08','DD-MON-RR'),to\_date('03-AUG-72','DD-MON-RR'),3,'OPRTN');

Insert into EMPLOYEE (EMP\_NUM,EMP\_LAST,EMP\_FIRST,HIRE\_DATE,DOB,SUPER\_ID,DEPT\_CODE)

values (15,'Faulkner','Noah',to\_date('30-NOV-11','DD-MON-RR'),to\_date('21-AUG-65','DD-MON-RR'),3,'OPRTN');

Insert into EMPLOYEE (EMP\_NUM,EMP\_LAST,EMP\_FIRST,HIRE\_DATE,DOB,SUPER\_ID,DEPT\_CODE)

values (16,'Browning','Nicole',to\_date('18-NOV-11','DD-MON-RR'),to\_date('05-JUN-87','DD-MON-RR'),3,'OPRTN');

Insert into EMPLOYEE (EMP\_NUM,EMP\_LAST,EMP\_FIRST,HIRE\_DATE,DOB,SUPER\_ID,DEPT\_CODE)

values (17,'Morrow','Sasha',to\_date('15-NOV-11','DD-MON-RR'),to\_date('01-MAR-88','DD-MON-RR'),4,'ITSUP');

Insert into EMPLOYEE (EMP\_NUM,EMP\_LAST,EMP\_FIRST,HIRE\_DATE,DOB,SUPER\_ID,DEPT\_CODE)

values (18,'Montgomery','Baker',to\_date('08-NOV-11','DD-MON-RR'),to\_date('15-MAY-88','DD-MON-RR'),4,'ITSUP');

Insert into EMPLOYEE (EMP\_NUM,EMP\_LAST,EMP\_FIRST,HIRE\_DATE,DOB,SUPER\_ID,DEPT\_CODE)

values (19,'Mcguire','Amanda',to\_date('06-NOV-08','DD-MON-RR'),to\_date('29-SEP-81','DD-MON-RR'),4,'ITSUP');

Insert into EMPLOYEE (EMP\_NUM,EMP\_LAST,EMP\_FIRST,HIRE\_DATE,DOB,SUPER\_ID,DEPT\_CODE)

values (20,'Maddox','Christian',to\_date('03-NOV-11','DD-MON-RR'),to\_date('30-SEP-79','DD-MON-RR'),4,'ITSUP');

Insert into EMPLOYEE (EMP\_NUM,EMP\_LAST,EMP\_FIRST,HIRE\_DATE,DOB,SUPER\_ID,DEPT\_CODE)

values (21,'Drake','Kibo',to\_date('16-OCT-12','DD-MON-RR'),to\_date('11-MAY-85','DD-MON-RR'),4,'ITSUP');

Insert into EMPLOYEE (EMP\_NUM,EMP\_LAST,EMP\_FIRST,HIRE\_DATE,DOB,SUPER\_ID,DEPT\_CODE)

values (22,'Butler','Lana',to\_date('06-OCT-13','DD-MON-RR'),to\_date('09-DEC-89','DD-MON-RR'),4,'ITSUP');

Insert into EMPLOYEE (EMP\_NUM,EMP\_LAST,EMP\_FIRST,HIRE\_DATE,DOB,SUPER\_ID,DEPT\_CODE)

values (23,'Noel','Amery',to\_date('03-OCT-11','DD-MON-RR'),to\_date('02-AUG-79','DD-MON-RR'),5,'HR');

Insert into EMPLOYEE (EMP\_NUM,EMP\_LAST,EMP\_FIRST,HIRE\_DATE,DOB,SUPER\_ID,DEPT\_CODE)

values (24,'Nguyen','Lane',to\_date('30-SEP-11','DD-MON-RR'),to\_date('02-JUN-83','DD-MON-RR'),5,'HR');

Insert into EMPLOYEE (EMP\_NUM,EMP\_LAST,EMP\_FIRST,HIRE\_DATE,DOB,SUPER\_ID,DEPT\_CODE)

values (25,'Wooten','Alexa',to\_date('29-SEP-11','DD-MON-RR'),to\_date('11-JUN-87','DD-MON-RR'),5,'HR');

Insert into EMPLOYEE (EMP\_NUM,EMP\_LAST,EMP\_FIRST,HIRE\_DATE,DOB,SUPER\_ID,DEPT\_CODE)

values (26,'Barry','Phillip',to\_date('15-SEP-11','DD-MON-RR'),to\_date('06-JAN-66','DD-MON-RR'),5,'HR');

Insert into EMPLOYEE (EMP\_NUM,EMP\_LAST,EMP\_FIRST,HIRE\_DATE,DOB,SUPER\_ID,DEPT\_CODE)

values (27,'Lloyd','Mia',to\_date('14-SEP-10','DD-MON-RR'),to\_date('12-MAY-79','DD-MON-RR'),5,'HR');

Insert into EMPLOYEE (EMP\_NUM,EMP\_LAST,EMP\_FIRST,HIRE\_DATE,DOB,SUPER\_ID,DEPT\_CODE)

values (28,'Kemp','Natalie',to\_date('04-SEP-11','DD-MON-RR'),to\_date('18-AUG-71','DD-MON-RR'),1,'ADMIN');

Insert into EMPLOYEE (EMP\_NUM,EMP\_LAST,EMP\_FIRST,HIRE\_DATE,DOB,SUPER\_ID,DEPT\_CODE)

values (29,'Bernard','Ashton',to\_date('23-AUG-12','DD-MON-RR'),to\_date('16-APR-81','DD-MON-RR'),1,'ADMIN');

Insert into EMPLOYEE (EMP\_NUM,EMP\_LAST,EMP\_FIRST,HIRE\_DATE,DOB,SUPER\_ID,DEPT\_CODE)

values (30,'Halliwel','Piper',to\_date('12-SEP-13','DD-MON-RR'),to\_date('16-NOV-71','DD-MON-RR'),1,'OPRTN');

### Manager

Update department set manager\_id = '2' where dept\_code = 'ACCTG';

Update department set manager\_id = '3' where dept\_code = 'OPRTN';

Update department set manager\_id = '4' where dept\_code = 'ITSUP';

Update department set manager\_id = '5' where dept\_code = 'HR';

Update department set manager\_id = '1' where dept\_code = 'ADMIN';

### Training

Insert into TRAINING (TRAIN\_NUM,CODE,EMP\_NUM,DATE\_ACQUIRED,NAME,COMMENTS)

values (1,'JAVA1',12,to\_date('05-MAY-13','DD-MON-RR'),'Spring IOC, MVC','Need to develop better references.');

Insert into TRAINING (TRAIN\_NUM,CODE,EMP\_NUM,DATE\_ACQUIRED,NAME,COMMENTS)

values (2,'PRJM1',13,to\_date('06-MAY-12','DD-MON-RR'),'PPM for PMI Certification','It would have been better if we had more hands on experience.');

Insert into TRAINING (TRAIN\_NUM,CODE,EMP\_NUM,DATE\_ACQUIRED,NAME,COMMENTS)

values (3,'J2EE',14,to\_date('07-MAY-11','DD-MON-RR'),'Struts','Schedule was too tight.');

Insert into TRAINING (TRAIN\_NUM,CODE,EMP\_NUM,DATE\_ACQUIRED,NAME,COMMENTS)

values (4,'JAVA1',15,to\_date('08-DEC-11','DD-MON-RR'),'Unit testing and regression testing','We need better trainers.');

Insert into TRAINING (TRAIN\_NUM,CODE,EMP\_NUM,DATE\_ACQUIRED,NAME,COMMENTS)

values (5,'J2EE',16,to\_date('09-MAY-12','DD-MON-RR'),'Black box testing and use cases','Trainers were excellent.');

Insert into TRAINING (TRAIN\_NUM,CODE,EMP\_NUM,DATE\_ACQUIRED,NAME,COMMENTS)

values (6,'J2EE',12,to\_date('10-MAY-13','DD-MON-RR'),'Struts vs Spring','Very good');

Insert into TRAINING (TRAIN\_NUM,CODE,EMP\_NUM,DATE\_ACQUIRED,NAME,COMMENTS)

values (7,'SQL1',13,to\_date('11-MAY-13','DD-MON-RR'),'Mobile development','Trainers voices were too soft');

Insert into TRAINING (TRAIN\_NUM,CODE,EMP\_NUM,DATE\_ACQUIRED,NAME,COMMENTS)

values (8,'SQL1',14,to\_date('12-NOV-11','DD-MON-RR'),'Mainframe and assembly','Too long.');

Insert into TRAINING (TRAIN\_NUM,CODE,EMP\_NUM,DATE\_ACQUIRED,NAME,COMMENTS)

values (9,'MOBDA',15,to\_date('13-DEC-11','DD-MON-RR'),'Wicket, Thymeleaf','Need to explain better the concept of aardvark.');

Insert into TRAINING (TRAIN\_NUM,CODE,EMP\_NUM,DATE\_ACQUIRED,NAME,COMMENTS)

values (10,'MOBDA',16,to\_date('14-MAY-13','DD-MON-RR'),'IOS Mobile Development','It would be nice if snacks were given.');

Insert into TRAINING (TRAIN\_NUM,CODE,EMP\_NUM,DATE\_ACQUIRED,NAME,COMMENTS)

values (11,'MOBDA',16,to\_date('14-JUN-13','DD-MON-RR'),'IOS Mobile Development','This is my second take.');

Insert into TRAINING (TRAIN\_NUM,CODE,EMP\_NUM,DATE\_ACQUIRED,NAME,COMMENTS)

values (12,'MOBDA',16,to\_date('14-JUL-13','DD-MON-RR'),'IOS Mobile Development','This is my third take.');

Insert into TRAINING (TRAIN\_NUM,CODE,EMP\_NUM,DATE\_ACQUIRED,NAME,COMMENTS)

values (13,'JAVA1',12,to\_date('05-JUN-13','DD-MON-RR'),'Spring IOC, MVC','Second take');

Insert into TRAINING (TRAIN\_NUM,CODE,EMP\_NUM,DATE\_ACQUIRED,NAME,COMMENTS)

values (14,'JAVA1',12,to\_date('05-AUG-13','DD-MON-RR'),'Spring IOC, MVC','Third take');

Insert into TRAINING (TRAIN\_NUM,CODE,EMP\_NUM,DATE\_ACQUIRED,NAME,COMMENTS)

values (15,'JAVA1',12,to\_date('05-SEP-13','DD-MON-RR'),'Spring IOC, MVC','Fourth take');

Insert into TRAINING (TRAIN\_NUM,CODE,EMP\_NUM,DATE\_ACQUIRED,NAME,COMMENTS)

values (16,'SQL2',23,to\_date('05-AUG-13','DD-MON-RR'),'Spring IOC, MVC','Third take');

Insert into TRAINING (TRAIN\_NUM,CODE,EMP\_NUM,DATE\_ACQUIRED,NAME,COMMENTS)

values (17,'SQL2',24,to\_date('05-SEP-13','DD-MON-RR'),'Spring IOC, MVC','Fourth take');

Insert into TRAINING (TRAIN\_NUM,CODE,EMP\_NUM,DATE\_ACQUIRED,NAME,COMMENTS)

values (18,'PRJM1',16,to\_date('05-AUG-13','DD-MON-RR'),'Spring IOC, MVC','Third take');

Insert into TRAINING (TRAIN\_NUM,CODE,EMP\_NUM,DATE\_ACQUIRED,NAME,COMMENTS)

values (19,'PRJM2',17,to\_date('05-SEP-13','DD-MON-RR'),'Spring IOC, MVC','Fourth take');

Insert into TRAINING (TRAIN\_NUM,CODE,EMP\_NUM,DATE\_ACQUIRED,NAME,COMMENTS)

values (20,'JAVA1',18,to\_date('05-AUG-13','DD-MON-RR'),'Spring IOC, MVC','Third take');

Insert into TRAINING (TRAIN\_NUM,CODE,EMP\_NUM,DATE\_ACQUIRED,NAME,COMMENTS)

values (21,'RUBY',7,to\_date('05-SEP-13','DD-MON-RR'),'Spring IOC, MVC','Fourth take');

Insert into TRAINING (TRAIN\_NUM,CODE,EMP\_NUM,DATE\_ACQUIRED,NAME,COMMENTS)

values (22,'PYTHO',8,to\_date('05-SEP-13','DD-MON-RR'),'Spring IOC, MVC','Fourth take');

Insert into TRAINING (TRAIN\_NUM,CODE,EMP\_NUM,DATE\_ACQUIRED,NAME,COMMENTS)

values (23,'PYTHO',1,to\_date('05-SEP-13','DD-MON-RR'),'Spring IOC, MVC','Fourth take');

### Client

Insert into CLIENT (CLIENT\_ID,NAME,STREET,CITY,STATE,ZIP\_CODE,INDUSTRY,WEB\_ADDRESS,PHONE,CONTACT\_NAME)

values ('8282','Quisque Institute','3215 Ac St.','Stamford','CT','84938','Banking',

'http://blogsearch.google.com/ping/RPC2 ','1-659-703-4221','Noelle Knowles');

Insert into CLIENT (CLIENT\_ID,NAME,STREET,CITY,STATE,ZIP\_CODE,INDUSTRY,WEB\_ADDRESS,PHONE,CONTACT\_NAME)

values ('4144','Mollis Non Cursus Foundation','P.O. Box 220, 9243 Gravida Av.','Nampa','ID','91192','Accounting',

'http://rpc.tailrank.com/ ','1-494-944-1279','Mariam J. Bauer');

Insert into CLIENT (CLIENT\_ID,NAME,STREET,CITY,STATE,ZIP\_CODE,INDUSTRY,WEB\_ADDRESS,PHONE,CONTACT\_NAME)

values ('4379','Nisi Company','434-7709 Est. Ave','Erie','PA','10245','Broadcasting',

'http://rpc.icerocket.com:10080/ ','1-434-720-7301','Iona K. Mcbride');

Insert into CLIENT (CLIENT\_ID,NAME,STREET,CITY,STATE,ZIP\_CODE,INDUSTRY,WEB\_ADDRESS,PHONE,CONTACT\_NAME)

values ('6976','Imperdiet Erat Inc.','349 Malesuada. Ave','Memphis','TN','70308','Broadcasting',

'http://ping.blo.gs/ ','1-618-347-4871','Malcolm D. Hurley');

Insert into CLIENT (CLIENT\_ID,NAME,STREET,CITY,STATE,ZIP\_CODE,INDUSTRY,WEB\_ADDRESS,PHONE,CONTACT\_NAME)

values ('8579','Maecenas Iaculis Consulting','P.O. Box 713, 4272 Euismod Rd.','Iowa City','IA','98054','Legal',

'http://rpc.technorati.com/rpc/ping ','1-436-401-4955','Ocean O. Ratliff');

Insert into CLIENT (CLIENT\_ID,NAME,STREET,CITY,STATE,ZIP\_CODE,INDUSTRY,WEB\_ADDRESS,PHONE,CONTACT\_NAME)

values ('1338','In Cursus Et Consulting','P.O. Box 923, 343 Erat Rd.','Minneapolis','MN','65304','Advertising',

'http://blogdigger.com/RPC2 ','1-370-583-8862','Fritz Dawson');

Insert into CLIENT (CLIENT\_ID,NAME,STREET,CITY,STATE,ZIP\_CODE,INDUSTRY,WEB\_ADDRESS,PHONE,CONTACT\_NAME)

values ('3541','Euismod In LLC','Ap #443-6640 Feugiat Av.','Auburn','ME','12600','Legal',

'http://ping.blo.gs/ ','1-955-423-1667','Martena N. Sharpe');

Insert into CLIENT (CLIENT\_ID,NAME,STREET,CITY,STATE,ZIP\_CODE,INDUSTRY,WEB\_ADDRESS,PHONE,CONTACT\_NAME)

values ('3035','Neque Corporation','Ap #903-5850 Nunc Ave','South Portland','ME','55471','Agriculture',

'http://a2b.cc/setloc/bp.a2b ','1-869-171-2139','Yuri Levine');

Insert into CLIENT (CLIENT\_ID,NAME,STREET,CITY,STATE,ZIP\_CODE,INDUSTRY,WEB\_ADDRESS,PHONE,CONTACT\_NAME)

values ('5062','Varius Corporation','9080 Et Rd.','Shreveport','LA','96488','Advertising',

'http://bblog.com/ping.php ','1-545-382-5397','Shannon Harper');

Insert into CLIENT (CLIENT\_ID,NAME,STREET,CITY,STATE,ZIP\_CODE,INDUSTRY,WEB\_ADDRESS,PHONE,CONTACT\_NAME)

values ('8683','Vitae Sodales Nisi Foundation','821-3561 Elit, Avenue','Henderson','NV','90516','Grocery',

'http://weblogues.com/RPC/ ','1-635-482-9606','Giacomo S. Joseph');

### Project

INSERT INTO PROJECT (PROJ\_NUMBER, NAME, START\_DATE, TOTAL\_COST, DEPT\_CODE, CLIENT\_ID)

VALUES (60.0,'Real Estate Appraisal for Hilton Hotels',to\_date('06-Dec-12'),439174.0,'ACCTG','8683');

INSERT INTO PROJECT (PROJ\_NUMBER, NAME, START\_DATE, TOTAL\_COST, DEPT\_CODE, CLIENT\_ID)

VALUES (21.0,'Collateral Valuation - BDO',to\_date('24-Jan-12'),53333.0,'ACCTG','5062');

INSERT INTO PROJECT (PROJ\_NUMBER, NAME, START\_DATE, TOTAL\_COST, DEPT\_CODE, CLIENT\_ID)

VALUES (64.0,'Work Flow Simulation of Soybean Factory',to\_date('01-Mar-13'),198570.0,'OPRTN','5062');

INSERT INTO PROJECT (PROJ\_NUMBER, NAME, START\_DATE, TOTAL\_COST, DEPT\_CODE, CLIENT\_ID)

VALUES (67.0,'Process Efficiency Evaluation for Wearhouse Shirts',to\_date('22-Jun-13'),350786.0,'OPRTN','8282');

INSERT INTO PROJECT (PROJ\_NUMBER, NAME, START\_DATE, TOTAL\_COST, DEPT\_CODE, CLIENT\_ID)

VALUES (69.0,'Database Configuration - SSS',to\_date('29-Nov-12'),327130.0,'ITSUP','8282');

INSERT INTO PROJECT (PROJ\_NUMBER, NAME, START\_DATE, TOTAL\_COST, DEPT\_CODE, CLIENT\_ID)

VALUES (99.0,'Ratatouille Kiosk and Web Checkin',to\_date('07-Jan-13'),313589.0,'ITSUP','8282');

INSERT INTO PROJECT (PROJ\_NUMBER, NAME, START\_DATE, TOTAL\_COST, DEPT\_CODE, CLIENT\_ID)

VALUES (70.0,'Internship and Junior Recruitment',to\_date('14-Jul-12'),429374.0,'HR','4379');

INSERT INTO PROJECT (PROJ\_NUMBER, NAME, START\_DATE, TOTAL\_COST, DEPT\_CODE, CLIENT\_ID)

VALUES (16.0,'Anderson Workbench Tool',to\_date('01-Jul-13'),400094.0,'HR','5062');

INSERT INTO PROJECT (PROJ\_NUMBER, NAME, START\_DATE, TOTAL\_COST, DEPT\_CODE, CLIENT\_ID)

VALUES (80.0,'Loratadine Maximus',to\_date('03-Mar-14'),382475.0,'OPRTN','4379');

INSERT INTO PROJECT (PROJ\_NUMBER, NAME, START\_DATE, TOTAL\_COST, DEPT\_CODE, CLIENT\_ID)

VALUES (81.0,'Automatic Appraisal System',to\_date('28-Nov-13'),340603.0,'OPRTN','3541');

INSERT INTO PROJECT (PROJ\_NUMBER, NAME, START\_DATE, TOTAL\_COST, DEPT\_CODE,

LIENT\_ID) VALUES (100.0,'Universal Robina Just In Time Inventory ',to\_date('17-Nov-13'),533122.0,'ITSUP','4144');

INSERT INTO PROJECT (PROJ\_NUMBER, NAME, START\_DATE, TOTAL\_COST, DEPT\_CODE, CLIENT\_ID)

VALUES (101.0,'Proctor and Gable Enterprise Resouce Management',to\_date('18-Nov-13'),198570.0,'ACCTG','4379');

INSERT INTO PROJECT (PROJ\_NUMBER, NAME, START\_DATE, TOTAL\_COST, DEPT\_CODE, CLIENT\_ID)

VALUES (102.0,'Novare Staff Right Sizing',to\_date('19-Nov-13'),350786.0,'HR','6976');

INSERT INTO PROJECT (PROJ\_NUMBER, NAME, START\_DATE, TOTAL\_COST, DEPT\_CODE, CLIENT\_ID)

VALUES (103.0,'Pointwest Technologies Disaster Mangement System',to\_date('20-Nov-13'),327130.0,'ACCTG','8579');

INSERT INTO PROJECT (PROJ\_NUMBER, NAME, START\_DATE, TOTAL\_COST, DEPT\_CODE, CLIENT\_ID)

VALUES (104.0,'Champ Cargosystem Lux',to\_date('21-Nov-13'),313589.0,'ITSUP','1338');

INSERT INTO PROJECT (PROJ\_NUMBER, NAME, START\_DATE, TOTAL\_COST, DEPT\_CODE, CLIENT\_ID)

VALUES (105.0,'Seven Seven Disaster Risk Assessment',to\_date('22-Nov-13'),429574.0,'ITSUP','3541');

INSERT INTO PROJECT (PROJ\_NUMBER, NAME, START\_DATE, TOTAL\_COST, DEPT\_CODE, CLIENT\_ID)

VALUES (106.0,'Big Pond CMMI Audit',to\_date('23-Nov-13'),442094.0,'ITSUP','3035');

INSERT INTO PROJECT (PROJ\_NUMBER, NAME, START\_DATE, TOTAL\_COST, DEPT\_CODE, CLIENT\_ID)

VALUES (107.0,'Navitaire CMMI Audit',to\_date('24-Nov-13'),382475.0,'ITSUP','5062');

INSERT INTO PROJECT (PROJ\_NUMBER, NAME, START\_DATE, TOTAL\_COST, DEPT\_CODE, CLIENT\_ID)

VALUES (108.0,'Ayala Technologies Effective Recruitment',to\_date('25-Nov-13'),340603.0,'HR','8683');

INSERT INTO PROJECT (PROJ\_NUMBER, NAME, START\_DATE, TOTAL\_COST, DEPT\_CODE, CLIENT\_ID)

VALUES (109.0,'Feasibility Study on Waste Management in Manila',to\_date('16-Nov-13'),439374.0,'OPRTN','8282');

INSERT INTO PROJECT (PROJ\_NUMBER, NAME, START\_DATE, TOTAL\_COST, DEPT\_CODE, CLIENT\_ID)

VALUES (110.0,'AtCMUA Android mobile application development',to\_date('01-Jan-14'),null,'ITSUP','4144');

INSERT INTO PROJECT (PROJ\_NUMBER, NAME, START\_DATE, TOTAL\_COST, DEPT\_CODE, CLIENT\_ID)

VALUES (111.0,'Option pricer calculator algorithm design',to\_date('08-Mar-14'),null,'ACCTG','4379');

INSERT INTO PROJECT (PROJ\_NUMBER, NAME, START\_DATE, TOTAL\_COST, DEPT\_CODE, CLIENT\_ID)

VALUES (112.0,'Employee satisfication survey',to\_date('21-Dec-13'),null,'HR','6976');

INSERT INTO PROJECT (PROJ\_NUMBER, NAME, START\_DATE, TOTAL\_COST, DEPT\_CODE, CLIENT\_ID)

VALUES (113.0,'Employee satisfication survey',to\_date('21-Dec-13'),null,'HR','6976');

### Assignment

INSERT INTO ASSIGNMENT (ASSIGN\_NUM, PROJ\_NUMBER, EMP\_NUM, DATE\_ASSIGNED, DATE\_ENDED, HOURS\_USED)

VALUES (1,70.0,15.0,to\_date('22-Jul-13'),to\_date('11-Dec-13'),170.0);

INSERT INTO ASSIGNMENT (ASSIGN\_NUM, PROJ\_NUMBER, EMP\_NUM, DATE\_ASSIGNED, DATE\_ENDED, HOURS\_USED)

VALUES (2,69.0,26.0,to\_date('24-Jul-13'),to\_date('07-Mar-14'),264.0);

INSERT INTO ASSIGNMENT (ASSIGN\_NUM, PROJ\_NUMBER, EMP\_NUM, DATE\_ASSIGNED, DATE\_ENDED, HOURS\_USED)

VALUES (3,67.0,17.0,to\_date('23-Jul-13'),to\_date('17-Apr-15'),181.0);

INSERT INTO ASSIGNMENT (ASSIGN\_NUM, PROJ\_NUMBER, EMP\_NUM, DATE\_ASSIGNED, DATE\_ENDED, HOURS\_USED)

VALUES (4,70.0,16.0,to\_date('17-May-13'),to\_date('03-Dec-13'),178.0);

INSERT INTO ASSIGNMENT (ASSIGN\_NUM, PROJ\_NUMBER, EMP\_NUM, DATE\_ASSIGNED, DATE\_ENDED, HOURS\_USED)

VALUES (5,81.0,30.0,to\_date('28-Nov-13'),to\_date('08-Sep-14'),261.0);

INSERT INTO ASSIGNMENT (ASSIGN\_NUM, PROJ\_NUMBER, EMP\_NUM, DATE\_ASSIGNED, DATE\_ENDED, HOURS\_USED)

VALUES (6,16.0,13.0,to\_date('19-Dec-13'),to\_date('24-Dec-15'),295.0);

INSERT INTO ASSIGNMENT (ASSIGN\_NUM, PROJ\_NUMBER, EMP\_NUM, DATE\_ASSIGNED, DATE\_ENDED, HOURS\_USED)

VALUES (7,16.0,4.0,to\_date('01-JUL-13'),to\_date('06-Feb-14'),202.0);

INSERT INTO ASSIGNMENT (ASSIGN\_NUM, PROJ\_NUMBER, EMP\_NUM, DATE\_ASSIGNED, DATE\_ENDED, HOURS\_USED)

VALUES (8,99.0,9.0,to\_date('07-JAN-13'),to\_date('21-Sep-13'),225.0);

INSERT INTO ASSIGNMENT (ASSIGN\_NUM, PROJ\_NUMBER, EMP\_NUM, DATE\_ASSIGNED, DATE\_ENDED, HOURS\_USED)

VALUES (9,69.0,6.0,to\_date('09-Oct-13'),to\_date('18-Mar-14'),186.0);

INSERT INTO ASSIGNMENT (ASSIGN\_NUM, PROJ\_NUMBER, EMP\_NUM, DATE\_ASSIGNED, DATE\_ENDED, HOURS\_USED)

VALUES (10,64.0,5.0,to\_date('02-Dec-13'),to\_date('22-May-14'),33.0);

INSERT INTO ASSIGNMENT (ASSIGN\_NUM, PROJ\_NUMBER, EMP\_NUM, DATE\_ASSIGNED, DATE\_ENDED, HOURS\_USED)

VALUES (11,64.0,30.0,to\_date('03-Aug-13'),to\_date('21-Dec-14'),197.0);

INSERT INTO ASSIGNMENT (ASSIGN\_NUM, PROJ\_NUMBER, EMP\_NUM, DATE\_ASSIGNED, DATE\_ENDED, HOURS\_USED)

VALUES (12,16.0,12.0,to\_date('01-JUL-13'),to\_date('12-Dec-13'),266.0);

INSERT INTO ASSIGNMENT (ASSIGN\_NUM, PROJ\_NUMBER, EMP\_NUM, DATE\_ASSIGNED, DATE\_ENDED, HOURS\_USED)

VALUES (13,70.0,4.0,to\_date('14-Aug-12'),to\_date('08-Mar-13'),53.0);

INSERT INTO ASSIGNMENT (ASSIGN\_NUM, PROJ\_NUMBER, EMP\_NUM, DATE\_ASSIGNED, DATE\_ENDED, HOURS\_USED)

VALUES (14,67.0,17.0,to\_date('22-JUN-13'),to\_date('10-JUL-13'),99.0);

INSERT INTO ASSIGNMENT (ASSIGN\_NUM, PROJ\_NUMBER, EMP\_NUM, DATE\_ASSIGNED, DATE\_ENDED, HOURS\_USED)

VALUES (15,69.0,16.0,to\_date('17-Jul-13'),to\_date('30-Dec-14'),12.0);

INSERT INTO ASSIGNMENT (ASSIGN\_NUM, PROJ\_NUMBER, EMP\_NUM, DATE\_ASSIGNED, DATE\_ENDED, HOURS\_USED)

VALUES (16,80.0,21.0,to\_date('03-MAR-14'),to\_date('04-Apr-15'),170.0);

INSERT INTO ASSIGNMENT (ASSIGN\_NUM, PROJ\_NUMBER, EMP\_NUM, DATE\_ASSIGNED, DATE\_ENDED, HOURS\_USED)

VALUES (17,99.0,26.0,to\_date('07-JAN-13'),to\_date('27-Aug-13'),22.0);

INSERT INTO ASSIGNMENT (ASSIGN\_NUM, PROJ\_NUMBER, EMP\_NUM, DATE\_ASSIGNED, DATE\_ENDED, HOURS\_USED)

VALUES (18,70.0,7.0,to\_date('17-Jan-13'),to\_date('24-Jul-15'),41.0);

INSERT INTO ASSIGNMENT (ASSIGN\_NUM, PROJ\_NUMBER, EMP\_NUM, DATE\_ASSIGNED, DATE\_ENDED, HOURS\_USED)

VALUES (19,69.0,11.0,to\_date('29-NOV-12'),to\_date('15-Mar-14'),47.0);

INSERT INTO ASSIGNMENT (ASSIGN\_NUM, PROJ\_NUMBER, EMP\_NUM, DATE\_ASSIGNED, DATE\_ENDED, HOURS\_USED)

VALUES (20,60,11,to\_date('06-DEC-12'),to\_date('15-Mar-14'),47.0);

INSERT INTO ASSIGNMENT (ASSIGN\_NUM, PROJ\_NUMBER, EMP\_NUM, DATE\_ASSIGNED, DATE\_ENDED, HOURS\_USED)

VALUES (21,21,12,to\_date('24-JAN-12'),to\_date('15-Mar-14'),47.0);

Insert into ASSIGNMENT (ASSIGN\_NUM,PROJ\_NUMBER,EMP\_NUM,DATE\_ASSIGNED,DATE\_ENDED,HOURS\_USED)

values (22,100,2,to\_date('17-NOV-13','DD-MON-RR'),to\_date('17-DEC-13','DD-MON-RR'),160);

Insert into ASSIGNMENT (ASSIGN\_NUM,PROJ\_NUMBER,EMP\_NUM,DATE\_ASSIGNED,DATE\_ENDED,HOURS\_USED)

values (23,100,2,to\_date('16-JAN-14','DD-MON-RR'),to\_date('15-FEB-14','DD-MON-RR'),160);

Insert into ASSIGNMENT (ASSIGN\_NUM,PROJ\_NUMBER,EMP\_NUM,DATE\_ASSIGNED,DATE\_ENDED,HOURS\_USED)

values (24,101,3,to\_date('18-NOV-13','DD-MON-RR'),to\_date('02-JAN-14','DD-MON-RR'),160);

Insert into ASSIGNMENT (ASSIGN\_NUM,PROJ\_NUMBER,EMP\_NUM,DATE\_ASSIGNED,DATE\_ENDED,HOURS\_USED)

values (25,101,3,to\_date('01-FEB-14','DD-MON-RR'),to\_date('03-MAR-14','DD-MON-RR'),160);

Insert into ASSIGNMENT (ASSIGN\_NUM,PROJ\_NUMBER,EMP\_NUM,DATE\_ASSIGNED,DATE\_ENDED,HOURS\_USED)

values (26,102,8,to\_date('19-NOV-13','DD-MON-RR'),to\_date('03-JAN-14','DD-MON-RR'),160);

Insert into ASSIGNMENT (ASSIGN\_NUM,PROJ\_NUMBER,EMP\_NUM,DATE\_ASSIGNED,DATE\_ENDED,HOURS\_USED)

values (27,102,8,to\_date('02-FEB-14','DD-MON-RR'),to\_date('04-MAR-14','DD-MON-RR'),160);

Insert into ASSIGNMENT (ASSIGN\_NUM,PROJ\_NUMBER,EMP\_NUM,DATE\_ASSIGNED,DATE\_ENDED,HOURS\_USED)

values (28,103,10,to\_date('20-NOV-13','DD-MON-RR'),to\_date('04-JAN-14','DD-MON-RR'),160);

Insert into ASSIGNMENT (ASSIGN\_NUM,PROJ\_NUMBER,EMP\_NUM,DATE\_ASSIGNED,DATE\_ENDED,HOURS\_USED)

values (29,103,10,to\_date('03-FEB-14','DD-MON-RR'),to\_date('05-MAR-14','DD-MON-RR'),160);

Insert into ASSIGNMENT (ASSIGN\_NUM,PROJ\_NUMBER,EMP\_NUM,DATE\_ASSIGNED,DATE\_ENDED,HOURS\_USED)

values (30,104,14,to\_date('21-NOV-13','DD-MON-RR'),to\_date('05-JAN-14','DD-MON-RR'),160);

Insert into ASSIGNMENT (ASSIGN\_NUM,PROJ\_NUMBER,EMP\_NUM,DATE\_ASSIGNED,DATE\_ENDED,HOURS\_USED)

values (31,104,14,to\_date('04-FEB-14','DD-MON-RR'),to\_date('06-MAR-14','DD-MON-RR'),160);

Insert into ASSIGNMENT (ASSIGN\_NUM,PROJ\_NUMBER,EMP\_NUM,DATE\_ASSIGNED,DATE\_ENDED,HOURS\_USED)

values (32,105,18,to\_date('22-NOV-13','DD-MON-RR'),to\_date('06-JAN-14','DD-MON-RR'),160);

Insert into ASSIGNMENT (ASSIGN\_NUM,PROJ\_NUMBER,EMP\_NUM,DATE\_ASSIGNED,DATE\_ENDED,HOURS\_USED)

values (33,105,18,to\_date('05-FEB-14','DD-MON-RR'),to\_date('07-MAR-14','DD-MON-RR'),160);

Insert into ASSIGNMENT (ASSIGN\_NUM,PROJ\_NUMBER,EMP\_NUM,DATE\_ASSIGNED,DATE\_ENDED,HOURS\_USED)

values (34,106,19,to\_date('23-NOV-13','DD-MON-RR'),to\_date('07-JAN-14','DD-MON-RR'),160);

Insert into ASSIGNMENT (ASSIGN\_NUM,PROJ\_NUMBER,EMP\_NUM,DATE\_ASSIGNED,DATE\_ENDED,HOURS\_USED)

values (35,106,19,to\_date('06-FEB-14','DD-MON-RR'),to\_date('08-MAR-14','DD-MON-RR'),160);

Insert into ASSIGNMENT (ASSIGN\_NUM,PROJ\_NUMBER,EMP\_NUM,DATE\_ASSIGNED,DATE\_ENDED,HOURS\_USED)

values (36,107,20,to\_date('24-NOV-13','DD-MON-RR'),to\_date('08-JAN-14','DD-MON-RR'),160);

Insert into ASSIGNMENT (ASSIGN\_NUM,PROJ\_NUMBER,EMP\_NUM,DATE\_ASSIGNED,DATE\_ENDED,HOURS\_USED)

values (37,107,20,to\_date('07-FEB-14','DD-MON-RR'),to\_date('09-MAR-14','DD-MON-RR'),160);

Insert into ASSIGNMENT (ASSIGN\_NUM,PROJ\_NUMBER,EMP\_NUM,DATE\_ASSIGNED,DATE\_ENDED,HOURS\_USED)

values (38,108,22,to\_date('25-NOV-13','DD-MON-RR'),to\_date('09-JAN-14','DD-MON-RR'),160);

Insert into ASSIGNMENT (ASSIGN\_NUM,PROJ\_NUMBER,EMP\_NUM,DATE\_ASSIGNED,DATE\_ENDED,HOURS\_USED)

values (39,108,22,to\_date('08-FEB-14','DD-MON-RR'),to\_date('10-MAR-14','DD-MON-RR'),160);

Insert into ASSIGNMENT (ASSIGN\_NUM,PROJ\_NUMBER,EMP\_NUM,DATE\_ASSIGNED,DATE\_ENDED,HOURS\_USED)

values (40,109,23,to\_date('16-NOV-13','DD-MON-RR'),to\_date('31-DEC-13','DD-MON-RR'),160);

Insert into ASSIGNMENT (ASSIGN\_NUM,PROJ\_NUMBER,EMP\_NUM,DATE\_ASSIGNED,DATE\_ENDED, HOURS\_USED)

values (41,110,4,to\_date('01-JAN-14','DD-MON-RR'),to\_date('18-JAN-14','DD-MON-RR'),300);

Insert into ASSIGNMENT (ASSIGN\_NUM,PROJ\_NUMBER,EMP\_NUM,DATE\_ASSIGNED,DATE\_ENDED,HOURS\_USED)

values (42,110,5,to\_date('01-FEB-14','DD-MON-RR'),to\_date('31-MAR-14','DD-MON-RR'),320);

Insert into ASSIGNMENT (ASSIGN\_NUM,PROJ\_NUMBER,EMP\_NUM,DATE\_ASSIGNED,DATE\_ENDED,HOURS\_USED)

values (43,111,6,to\_date('01-MAR-14','DD-MON-RR'),to\_date('31-MAR-14','DD-MON-RR'),400);

Insert into ASSIGNMENT (ASSIGN\_NUM,PROJ\_NUMBER,EMP\_NUM,DATE\_ASSIGNED,DATE\_ENDED,HOURS\_USED)

values (44,111,7,to\_date('01-APR-14','DD-MON-RR'),to\_date('28-APR-14','DD-MON-RR'),300);

Insert into ASSIGNMENT (ASSIGN\_NUM,PROJ\_NUMBER,EMP\_NUM,DATE\_ASSIGNED,DATE\_ENDED,HOURS\_USED)

values (45,112,9,to\_date('01-DEC-13','DD-MON-RR'),to\_date('31-DEC-14','DD-MON-RR'),500);

Insert into ASSIGNMENT (ASSIGN\_NUM,PROJ\_NUMBER,EMP\_NUM,DATE\_ASSIGNED,DATE\_ENDED,HOURS\_USED)

values (46,112,11,to\_date('01-JAN-13','DD-MON-RR'),to\_date('25-JAN-14','DD-MON-RR'),550);

Insert into ASSIGNMENT (ASSIGN\_NUM,PROJ\_NUMBER,EMP\_NUM,DATE\_ASSIGNED,DATE\_ENDED, HOURS\_USED)

values (47,113,4,to\_date('01-JAN-14','DD-MON-RR'),to\_date('20-JAN-14','DD-MON-RR'),300);

Insert into ASSIGNMENT (ASSIGN\_NUM,PROJ\_NUMBER,EMP\_NUM,DATE\_ASSIGNED,DATE\_ENDED,HOURS\_USED)

values (48,113,5,to\_date('01-JAN-14','DD-MON-RR'),to\_date('15-JAN-14','DD-MON-RR'),320);

Insert into ASSIGNMENT (ASSIGN\_NUM,PROJ\_NUMBER,EMP\_NUM,DATE\_ASSIGNED,DATE\_ENDED,HOURS\_USED)

values (49,113,6,to\_date('17-JAN-14','DD-MON-RR'),to\_date('31-JAN-14','DD-MON-RR'),400);

Insert into ASSIGNMENT (ASSIGN\_NUM,PROJ\_NUMBER,EMP\_NUM,DATE\_ASSIGNED,DATE\_ENDED,HOURS\_USED)

values (50,113,7,to\_date('01-FEB-14','DD-MON-RR'),to\_date('28-FEB-14','DD-MON-RR'),300);

Insert into ASSIGNMENT (ASSIGN\_NUM,PROJ\_NUMBER,EMP\_NUM,DATE\_ASSIGNED,DATE\_ENDED,HOURS\_USED)

values (51,113,9,to\_date('01-MAR-14','DD-MON-RR'),to\_date('31-MAR-14','DD-MON-RR'),500);

Insert into ASSIGNMENT (ASSIGN\_NUM,PROJ\_NUMBER,EMP\_NUM,DATE\_ASSIGNED,DATE\_ENDED,HOURS\_USED)

values (52,113,11,to\_date('01-APR-14','DD-MON-RR'),to\_date('30-APR-14','DD-MON-RR'),550);

## Content of table

### Assignment

select \* from assignment;

ASSIGN\_NUM PROJ\_NUMBER EMP\_NUM DATE\_ASSIG DATE\_ENDED HOURS\_USED

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

1 70 15 22-JUL-13 11-DEC-13 170

2 69 26 24-JUL-13 07-MAR-14 264

3 67 17 23-JUL-13 17-APR-15 181

4 70 16 17-MAY-13 03-DEC-13 178

5 81 30 28-NOV-13 08-SEP-14 261

6 16 13 19-DEC-13 24-DEC-15 295

7 16 4 01-JUL-13 06-FEB-14 202

8 99 9 07-JAN-13 21-SEP-13 225

9 69 6 09-OCT-13 18-MAR-14 186

10 64 5 02-DEC-13 22-MAY-14 33

11 64 30 03-AUG-13 21-DEC-14 197

12 16 12 01-JUL-13 12-DEC-13 266

13 70 4 14-AUG-12 08-MAR-13 53

14 67 17 22-JUN-13 10-JUL-13 99

15 69 16 17-JUL-13 30-DEC-14 12

16 80 21 03-MAR-14 04-APR-15 170

17 99 26 07-JAN-13 27-AUG-13 22

18 70 7 17-JAN-13 24-JUL-15 41

19 69 11 29-NOV-12 15-MAR-14 47

20 60 11 06-DEC-12 15-MAR-14 47

21 21 12 24-JAN-12 15-MAR-14 47

22 100 2 17-NOV-13 17-DEC-13 160

23 100 2 16-JAN-14 15-FEB-14 160

24 101 3 18-NOV-13 02-JAN-14 160

25 101 3 01-FEB-14 03-MAR-14 160

26 102 8 19-NOV-13 03-JAN-14 160

27 102 8 02-FEB-14 04-MAR-14 160

28 103 10 20-NOV-13 04-JAN-14 160

29 103 10 03-FEB-14 05-MAR-14 160

30 104 14 21-NOV-13 05-JAN-14 160

31 104 14 04-FEB-14 06-MAR-14 160

32 105 18 22-NOV-13 06-JAN-14 160

33 105 18 05-FEB-14 07-MAR-14 160

34 106 19 23-NOV-13 07-JAN-14 160

35 106 19 06-FEB-14 08-MAR-14 160

36 107 20 24-NOV-13 08-JAN-14 160

37 107 20 07-FEB-14 09-MAR-14 160

38 108 22 25-NOV-13 09-JAN-14 160

39 108 22 08-FEB-14 10-MAR-14 160

40 109 23 16-NOV-13 31-DEC-13 160

41 110 4 01-JAN-14 18-JAN-14 300

42 110 5 01-FEB-14 31-MAR-14 320

43 111 6 01-MAR-14 31-MAR-14 400

44 111 7 01-APR-14 28-APR-14 300

45 112 9 01-DEC-13 31-DEC-14 500

46 112 11 01-JAN-13 25-JAN-14 550

47 113 4 01-JAN-14 20-JAN-14 300

48 113 5 01-JAN-14 15-JAN-14 320

49 113 6 17-JAN-14 31-JAN-14 400

50 113 7 01-FEB-14 28-FEB-14 300

51 113 9 01-MAR-14 31-MAR-14 500

52 113 11 01-APR-14 30-APR-14 550

### Client

SQL> select \* from client;

CLIENT\_ID NAME STREET CITY ST ZIP\_CODE INDUSTRY WEB\_ADDRESS PHONE CONTACT\_NAME

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

8282 Quisque Institute 3215 Ac St. Stamford CT 84938 Banking http://blogsearch.google.com/ping/RPC2 1-659-703-4221 Noelle Knowles

4144 Mollis Non Cursus Foundation P.O. Box 220, 9243 Gravida Av. Nampa ID 91192 Accounting http://rpc.tailrank.com/ 1-494-944-1279 Mariam J. Bauer

4379 Nisi Company 434-7709 Est. Ave Erie PA 10245 Broadcasting http://rpc.icerocket.com:10080/ 1-434-720-7301 Iona K. Mcbride

6976 Imperdiet Erat Inc. 349 Malesuada. Ave Memphis TN 70308 Broadcasting http://ping.blo.gs/ 1-618-347-4871 Malcolm D. Hurley

8579 Maecenas Iaculis Consulting P.O. Box 713, 4272 Euismod Rd. Iowa City IA 98054 Legal http://rpc.technorati.com/rpc/ping 1-436-401-4955 Ocean O. Ratliff

1338 In Cursus Et Consulting P.O. Box 923, 343 Erat Rd. Minneapolis MN 65304 Advertising http://blogdigger.com/RPC2 1-370-583-8862 Fritz Dawson

3541 Euismod In LLC Ap #443-6640 Feugiat Av. Auburn ME 12600 Legal http://ping.blo.gs/ 1-955-423-1667 Martena N. Sharpe

3035 Neque Corporation Ap #903-5850 Nunc Ave South Portland ME 55471 Agriculture http://a2b.cc/setloc/bp.a2b 1-869-171-2139 Yuri Levine

5062 Varius Corporation 9080 Et Rd. Shreveport LA 96488 Advertising http://bblog.com/ping.php 1-545-382-5397 Shannon Harper

8683 Vitae Sodales Nisi Foundation 821-3561 Elit, Avenue Henderson NV 90516 Grocery http://weblogues.com/RPC/ 1-635-482-9606 Giacomo S. Joseph

### Department

SQL> select \* from department;

DEPT\_CODE NAME LOCATION PHONE MANAGER\_ID

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

ACCTG Accounting Grouger St. Adelaide (408) 777-9220 2

OPRTN Operations Bideford St. Clarence Gardens (674) 290-5550 3

ITSUP IT Support Osmena Makati City (273) 961-7241 4

HR Human Resource Osmena Makati City (638) 439-5070 5

ADMIN Administration Victoria Square, Adelaide (408) 932-8865 1

### Employee

SQL> select \* from employee;

EMP\_NUM EMP\_LAST EMP\_FIRST HIRE\_DATE DOB SUPER\_ID DEPT\_CODE

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

1 Blankenship Jin 09-APR-19 16-APR-74 ADMIN

2 Bean Kasimir 27-MAR-11 19-FEB-79 1 ACCTG

3 Boyle Benedict 26-MAR-09 28-MAR-63 1 OPRTN

4 Mcgee Eugenia 26-MAR-11 13-JUN-74 1 ITSUP

5 Alford Brendan 17-MAR-11 21-OCT-60 1 HR

6 Estes Chaim 14-MAR-11 22-APR-72 1 OPRTN

7 Sharp Fuller 14-MAR-11 05-JUL-81 2 ACCTG

8 Simon Maisie 09-MAR-11 03-MAY-89 2 ACCTG

9 Baldwin Sybil 14-FEB-09 19-JUN-73 2 ACCTG

10 Brock Ava 06-FEB-11 26-JUN-63 2 ACCTG

11 Matthews Ori 29-JAN-10 11-JUN-72 2 ACCTG

12 Holloway Wynter 16-JAN-13 12-FEB-69 3 OPRTN

13 Swanson Margaret 07-JAN-11 27-SEP-79 3 OPRTN

14 Acevedo Jolie 05-JAN-08 03-AUG-72 3 OPRTN

15 Faulkner Noah 30-NOV-11 21-AUG-65 3 OPRTN

16 Browning Nicole 18-NOV-11 05-JUN-87 3 OPRTN

17 Morrow Sasha 15-NOV-11 01-MAR-88 4 ITSUP

18 Montgomery Baker 08-NOV-11 15-MAY-88 4 ITSUP

19 Mcguire Amanda 06-NOV-08 29-SEP-81 4 ITSUP

20 Maddox Christian 03-NOV-11 30-SEP-79 4 ITSUP

21 Drake Kibo 16-OCT-12 11-MAY-85 4 ITSUP

22 Butler Lana 06-OCT-13 09-DEC-89 4 ITSUP

23 Noel Amery 03-OCT-11 02-AUG-79 5 HR

24 Nguyen Lane 30-SEP-11 02-JUN-83 5 HR

25 Wooten Alexa 29-SEP-11 11-JUN-87 5 HR

26 Barry Phillip 15-SEP-11 06-JAN-66 5 HR

27 Lloyd Mia 14-SEP-10 12-MAY-79 5 HR

28 Kemp Natalie 04-SEP-11 18-AUG-71 1 ADMIN

29 Bernard Ashton 23-AUG-12 16-APR-81 1 ADMIN

30 Halliwel Piper 12-SEP-13 16-NOV-71 1 OPRTN

### Skill

SQL> select \* from skill;

CODE DESCRIPTION

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

JAVA1 Basic programming with Java

JAVA2 Advanced programming with Java

J2EE Java Enterprise Edition - servlets, jsp, servers

SQL1 Basic queries using oracle SQL

SQL2 Advance qureies using oracle SQL

PRJM1 Project management 1 for PMI certification

PRJM2 IT Project mangement for PMI certification

RUBY Web development with Ruby on rails

PYTHO Web development with Python

MOBDA Android mobile development

### Project

SQL> select \* from project;

PROJ\_NUMBER NAME START\_DATE TOTAL\_COST DEPT\_CODE CLIENT\_ID

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60 Real Estate Appraisal for Hilton Hotels 06-DEC-12 439174 ACCTG 8683

21 Collateral Valuation - BDO 24-JAN-12 53333 ACCTG 5062

64 Work Flow Simulation of Soybean Factory 01-MAR-13 198570 OPRTN 5062

67 Process Efficiency Evaluation for Wearhouse Shirts 22-JUN-13 350786 OPRTN 8282

69 Database Configuration - SSS 29-NOV-12 327130 ITSUP 8282

99 Ratatouille Kiosk and Web Checkin 07-JAN-13 313589 ITSUP 8282

70 Internship and Junior Recruitment 14-JUL-12 429374 HR 4379

16 Anderson Workbench Tool 01-JUL-13 400094 HR 5062

80 Loratadine Maximus 03-MAR-14 382475 OPRTN 4379

81 Automatic Appraisal System 28-NOV-13 340603 OPRTN 3541

100 Universal Robina Just In Time Inventory 17-NOV-13 533122 ITSUP 4144

101 Proctor and Gable Enterprise Resouce Management 18-NOV-13 198570 ACCTG 4379

102 Novare Staff Right Sizing 19-NOV-13 350786 HR 6976

103 Pointwest Technologies Disaster Mangement System 20-NOV-13 327130 ACCTG 8579

104 Champ Cargosystem Lux 21-NOV-13 313589 ITSUP 1338

105 Seven Seven Disaster Risk Assessment 22-NOV-13 429574 ITSUP 3541

106 Big Pond CMMI Audit 23-NOV-13 442094 ITSUP 3035

107 Navitaire CMMI Audit 24-NOV-13 382475 ITSUP 5062

108 Ayala Technologies Effective Recruitment 25-NOV-13 340603 HR 8683

109 Feasibility Study on Waste Management in Manila 16-NOV-13 439374 OPRTN 8282

110 AtCMUA Android mobile application development 01-JAN-14 ITSUP 4144

111 Option pricer calculator algorithm design 08-MAR-14 ACCTG 4379

112 Employee satisfication survey 21-DEC-13 HR 6976

113 Employee satisfication survey 21-DEC-13 HR 6976

### Training

SQL> select \* from training;

TRAIN\_NUM CODE EMP\_NUM DATE\_ACQUIRED NAME COMMENTS

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

1 JAVA1 12 05-MAY-13 Spring IOC, MVC Need to develop better references.

2 PRJM1 13 06-MAY-12 PPM for PMI Certification It would have been better if we had more hands on experience.

3 J2EE 14 07-MAY-11 Struts Schedule was too tight.

4 JAVA1 15 08-DEC-11 Unit testing and regression testing We need better trainers.

5 J2EE 16 09-MAY-12 Black box testing and use cases Trainers were excellent.

6 J2EE 12 10-MAY-13 Struts vs Spring Very good

7 SQL1 13 11-MAY-13 Mobile development Trainers voices were too soft

8 SQL1 14 12-NOV-11 Mainframe and assembly Too long.

9 MOBDA 15 13-DEC-11 Wicket, Thymeleaf Need to explain better the concept of aardvark.

10 MOBDA 16 14-MAY-13 IOS Mobile Development It would be nice if snacks were given.

11 MOBDA 16 14-JUN-13 IOS Mobile Development This is my second take.

12 MOBDA 16 14-JUL-13 IOS Mobile Development This is my third take.

13 JAVA1 12 05-JUN-13 Spring IOC, MVC Second take

14 JAVA1 12 05-AUG-13 Spring IOC, MVC Third take

15 JAVA1 12 05-SEP-13 Spring IOC, MVC Fourth take

16 SQL2 23 05-AUG-13 Spring IOC, MVC Third take

17 SQL2 24 05-SEP-13 Spring IOC, MVC Fourth take

18 PRJM1 16 05-AUG-13 Spring IOC, MVC Third take

19 PRJM2 17 05-SEP-13 Spring IOC, MVC Fourth take

20 JAVA1 18 05-AUG-13 Spring IOC, MVC Third take

21 RUBY 7 05-SEP-13 Spring IOC, MVC Fourth take

22 PYTHO 8 05-SEP-13 Spring IOC, MVC Fourth take

23 PYTHO 1 05-SEP-13 Spring IOC, MVC Fourth take

# Queries created in Part II.B.

## Query 1

SQL> SELECT EMP\_NUM || ': ' || EMP\_LAST || ' ' || EMP\_FIRST "EMPLOYEE",

2 CODE "SKILL",

3 decode(TO\_CHAR(COUNT(CODE)), 0, NULL, TO\_CHAR(COUNT(CODE))) "TIMES",

4 TO\_CHAR(MAX(DATE\_ACQUIRED)) "RECENT DATE",

5 TRUNC(MONTHS\_BETWEEN(SYSDATE, MAX(DATE\_ACQUIRED))) "# MONTHS AGO"

6 FROM EMPLOYEE LEFT OUTER JOIN TRAINING USING (EMP\_NUM)

7 GROUP BY EMP\_NUM, EMP\_LAST, EMP\_FIRST, CODE

8 ORDER BY EMP\_NUM;

EMPLOYEE SKILL TIMES RECENT DATE # MONTHS AGO

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

1: Blankenship Jin PYTHO 1 05-SEP-13 7

2: Bean Kasimir

3: Boyle Benedict

4: Mcgee Eugenia

5: Alford Brendan

6: Estes Chaim

7: Sharp Fuller RUBY 1 05-SEP-13 7

8: Simon Maisie PYTHO 1 05-SEP-13 7

9: Baldwin Sybil

10: Brock Ava

11: Matthews Ori

12: Holloway Wynter J2EE 1 10-MAY-13 11

JAVA1 4 05-SEP-13 7

13: Swanson Margaret PRJM1 1 06-MAY-12 23

SQL1 1 11-MAY-13 11

14: Acevedo Jolie J2EE 1 07-MAY-11 35

SQL1 1 12-NOV-11 29

15: Faulkner Noah JAVA1 1 08-DEC-11 28

MOBDA 1 13-DEC-11 28

16: Browning Nicole J2EE 1 09-MAY-12 23

MOBDA 3 14-JUL-13 9

PRJM1 1 05-AUG-13 8

17: Morrow Sasha PRJM2 1 05-SEP-13 7

18: Montgomery Baker JAVA1 1 05-AUG-13 8

19: Mcguire Amanda

20: Maddox Christian

21: Drake Kibo

22: Butler Lana

23: Noel Amery SQL2 1 05-AUG-13 8

24: Nguyen Lane SQL2 1 05-SEP-13 7

25: Wooten Alexa

26: Barry Phillip

27: Lloyd Mia

28: Kemp Natalie

29: Bernard Ashton

30: Halliwel Piper

## Query 2

SQL> SELECT LEVEL,

2 LPAD(' ', 3\*(LEVEL - 1)) || emp\_num || ' ' ||

3 emp\_first || ' ' || emp\_last "Employee", dept\_code

4 FROM employee

5 START WITH emp\_num = 1

6 CONNECT BY PRIOR emp\_num = super\_ID;

LEVEL Employee DEPT\_

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

1 1 Jin Blankenship ADMIN

2 2 Kasimir Bean ACCTG

3 7 Fuller Sharp ACCTG

3 8 Maisie Simon ACCTG

3 9 Sybil Baldwin ACCTG

3 10 Ava Brock ACCTG

3 11 Ori Matthews ACCTG

2 3 Benedict Boyle OPRTN

3 12 Wynter Holloway OPRTN

3 13 Margaret Swanson OPRTN

3 14 Jolie Acevedo OPRTN

3 15 Noah Faulkner OPRTN

3 16 Nicole Browning OPRTN

2 4 Eugenia Mcgee ITSUP

3 17 Sasha Morrow ITSUP

3 18 Baker Montgomery ITSUP

3 19 Amanda Mcguire ITSUP

3 20 Christian Maddox ITSUP

3 21 Kibo Drake ITSUP

3 22 Lana Butler ITSUP

2 5 Brendan Alford HR

3 23 Amery Noel HR

3 24 Lane Nguyen HR

3 25 Alexa Wooten HR

3 26 Phillip Barry HR

3 27 Mia Lloyd HR

2 6 Chaim Estes OPRTN

2 28 Natalie Kemp ADMIN

2 29 Ashton Bernard ADMIN

2 30 Piper Halliwel OPRTN

## Query 3

SQL> SELECT DECODE(NAME, NULL, 'IN TOTAL', NAME) AS "ONGOING PROJECT NAME", START\_DATE,

2 TO\_CHAR(DATE\_ASSIGNED, 'MON-YYYY') "MONTH",

3 COUNT(EMP\_NUM) "#EMPLOYEES", SUM(HOURS\_USED) "TOTAL HOURS"

4 FROM PROJECT LEFT OUTER JOIN ASSIGNMENT USING (PROJ\_NUMBER)

5 WHERE TOTAL\_COST IS NULL

6 GROUP BY GROUPING SETS ((NAME, START\_DATE, TO\_CHAR(DATE\_ASSIGNED, 'MON-YYYY')), ());

ONGOING PROJECT NAME START\_DAT MONTH #EMPLOYEES TOTAL HOURS

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

Employee satisfication survey 21-DEC-13 APR-2014 1 550

DEC-2013 1 500

FEB-2014 1 300

JAN-2013 1 550

JAN-2014 3 1020

MAR-2014 1 500

Option pricer calculator algorithm design 08-MAR-14 APR-2014 1 300

MAR-2014 1 400

AtCMUA Android mobile application development 01-JAN-14 FEB-2014 1 320

JAN-2014 1 300

IN TOTAL 12 4740

## Query 4

SQL> alter table employee add bonus number(10);

SQL> update employee x set x.bonus =

2 (

3 select 200 \* count(proj\_number) from assignment join project using (proj\_number)

4 where START\_DATE > to\_date('1-JAN-2013','DD-MON-YYYY') and hours\_used > 40 and emp\_num = x.emp\_num

5 group by emp\_num

6 having count(proj\_number) > 0

7 );

## Query 5

SQL> SELECT EMP\_LAST || ' ' || EMP\_FIRST "EMPLOYEE", HIRE\_DATE,

2 CODE "SKILL",

3 TO\_CHAR(DATE\_ACQUIRED) "TRAINING DATE",

4 TRUNC(DATE\_ACQUIRED - HIRE\_DATE) "DAYS AFTER HIRING",

5 DECODE(PROJ\_NUM, NULL, 0, PROJ\_NUM) "PROJECT NUMBER"

6 FROM EMPLOYEE LEFT OUTER JOIN TRAINING USING (EMP\_NUM)

7 LEFT OUTER JOIN

8 ( SELECT EMP\_NUM, COUNT(PROJ\_NUMBER) AS PROJ\_NUM

9 FROM ASSIGNMENT LEFT OUTER JOIN PROJECT USING (PROJ\_NUMBER)

10 GROUP BY EMP\_NUM )

11 USING (EMP\_NUM)

12 WHERE TO\_NUMBER(TO\_CHAR(HIRE\_DATE, 'YYYY')) - TO\_NUMBER(TO\_CHAR(SYSDATE, 'YYYY')) = -1;

EMPLOYEE HIRE\_DATE SKILL TRAINING DATE DAYS AFTER HIRING PROJECT NUMBER

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

Holloway Wynter 16-JAN-13 JAVA1 05-MAY-13 109 2

J2EE 10-MAY-13 114

JAVA1 05-JUN-13 140

JAVA1 05-AUG-13 201

JAVA1 05-SEP-13 232

Butler Lana 06-OCT-13 2

Halliwel Piper 12-SEP-13 2

## Query 6

SQL> select proj\_number, name, start\_date, decode(total\_cost, null, 'on-going', 'complete') as "status"

2 from project left outer join (

3 select P, sum(R) as iscontinue

4 from (

5 select P, A, S, E, mins, maxe, L, LO, PREV\_LO,

6 decode(sign(LO - PREV\_LO - L - 2), -1, 0, 1) as R

7 from (

8 select P, A, S, E, mins, maxe,

9 e - s as L,

10 maxe - mins as LO,

11 decode(lag((maxe - mins), 1) over (partition by P order by S), null, 0,

12 lag((maxe - mins), 1) over (partition by P order by S)) as PREV\_LO

13 from (

14 select proj\_number as P, assign\_num as A, date\_assigned as S, decode(date\_ended, null, sysdate, date\_ended) as E,

15 min(date\_assigned) over

16 (partition by proj\_number order by date\_assigned rows between unbounded preceding and current row) as mins,

17 max(decode(date\_ended, null, sysdate, date\_ended)) over

18 (partition by proj\_number order by date\_assigned rows between unbounded preceding and current row) as maxe

19 from assignment

20 order by proj\_number, date\_assigned)

21 )

22 )

23 group by P

24 ) on (proj\_number = P)

25 where iscontinue != 0

26 order by proj\_number;

PROJ\_NUMBER NAME START\_DATE status

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

67 Process Efficiency Evaluation for Wearhouse Shirts 22-JUN-13 complete

100 Universal Robina Just In Time Inventory 17-NOV-13 complete

101 Proctor and Gable Enterprise Resouce Management 18-NOV-13 complete

102 Novare Staff Right Sizing 19-NOV-13 complete

103 Pointwest Technologies Disaster Mangement System 20-NOV-13 complete

104 Champ Cargosystem Lux 21-NOV-13 complete

105 Seven Seven Disaster Risk Assessment 22-NOV-13 complete

106 Big Pond CMMI Audit 23-NOV-13 complete

107 Navitaire CMMI Audit 24-NOV-13 complete

108 Ayala Technologies Effective Recruitment 25-NOV-13 complete

110 AtCMUA Android mobile application development 01-JAN-14 on-going

11 rows selected.

## Query 7

SQL> CLEAR COLUMN

columns cleared

SQL> COLUMN QUARTER FORMAT A5

SQL> COLUMN "PROJ\_NUM" HEADING "PROJECT|NUMBER"

SQL> COLUMN "EMP\_NUM" HEADING "EMPOLYEE|NUMBER"

SQL> COLUMN "HOURS\_USED" HEADING "HOURS|USED"

SQL> SELECT QUARTER, DECODE("PROJ NUM", NULL, 0, "PROJ NUM") "PROJ\_NUM",

2 DECODE("EMP NUM", NULL, 0, "EMP NUM") "EMP\_NUM",

3 DECODE("HOURS USED", NULL, 0, "HOURS USED") "HOURS\_USED"

4 FROM

5 (

6 SELECT 'Q1' AS Q FROM DUAL UNION SELECT 'Q2' AS Q FROM DUAL UNION

7 SELECT 'Q3' AS Q FROM DUAL UNION SELECT 'Q4' AS Q FROM DUAL

8 ) LEFT OUTER JOIN(

9 SELECT DECODE(TO\_NUMBER(TO\_CHAR(START\_DATE, 'MM')),

10 1, 'Q1', 2, 'Q1', 3, 'Q1',

11 4, 'Q2', 5, 'Q2', 6, 'Q2',

12 7, 'Q3', 8, 'Q3', 9, 'Q3',

13 10, 'Q4', 11, 'Q4', 12, 'Q4', 'ERROR') AS QUARTER,

14 COUNT(PROJ\_NUMBER) "PROJ NUM",

15 COUNT(DISTINCT(EMP\_NUM)) "EMP NUM",

16 SUM(HOURS\_USED) "HOURS USED"

17 FROM PROJECT LEFT OUTER JOIN ASSIGNMENT USING (PROJ\_NUMBER)

18 WHERE TO\_NUMBER(TO\_CHAR(START\_DATE, 'YYYY')) - TO\_NUMBER(TO\_CHAR(SYSDATE, 'YYYY')) = -1

19 GROUP BY DECODE(TO\_NUMBER(TO\_CHAR(START\_DATE, 'MM')),

20 1, 'Q1', 2, 'Q1', 3, 'Q1',

21 4, 'Q2', 5, 'Q2', 6, 'Q2',

22 7, 'Q3', 8, 'Q3', 9, 'Q3',

23 10, 'Q4', 11, 'Q4', 12, 'Q4', 'ERROR')

24 )ON (Q = QUARTER)

25 ORDER BY QUARTER;

PROJECT EMPOLYEE HOURS

QUART NUMBER NUMBER USED

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

Q1 4 4 477

Q2 2 1 280

Q3 3 3 763

Q4 28 17 6721

## Query 8

SQL> column "Latest Date Acquired" heading "Latest|Date|Acquired" format A12

SQL> column count(code) heading "Number|of|Skills" format 99

SQL>

SQL> select decode(emp\_num, null, ' ', emp\_num) id,

2 decode(emp\_first || ' ' || emp\_last, ' ', 'Number of Trainings', emp\_first || ' ' || emp\_last) "Employee Name",

3 sum(decode(code, 'JAVA1', 1, 0)) "JAVA1",

4 decode(emp\_num, null, ' ', nvl(to\_char(max(case when code = 'JAVA1' then date\_acquired else null end), 'dd-Mon-yyyy'), ' ')) as "Latest Date Acquired",

5 sum(decode(code, 'JAVA2', 1, 0)) "JAVA2",

6 decode(emp\_num, null, ' ', nvl(to\_char(max(case when code = 'JAVA2' then date\_acquired else null end), 'dd-Mon-yyyy'), ' ')) as "Latest Date Acquired",

7 sum(decode(code, 'J2EE', 1, 0)) "J2EE",

8 decode(emp\_num, null, ' ', nvl(to\_char(max(case when code = 'J2EE' then date\_acquired else null end), 'dd-Mon-yyyy'), ' ')) as "Latest Date Acquired",

9 sum(decode(code, 'MOBDA', 1, 0)) "MOBDA",

10 decode(emp\_num, null, ' ', nvl(to\_char(max(case when code = 'MOBDA' then date\_acquired else null end), 'dd-Mon-yyyy'), ' ')) as "Latest Date Acquired",

11 sum(decode(code, 'PRJM1', 1, 0)) "PRJM1",

12 decode(emp\_num, null, ' ', nvl(to\_char(max(case when code = 'PRJM1' then date\_acquired else null end), 'dd-Mon-yyyy'), ' ')) as "Latest Date Acquired",

13 sum(decode(code, 'PRJM2', 1, 0)) "PRJM2",

14 decode(emp\_num, null, ' ', nvl(to\_char(max(case when code = 'PRJM2' then date\_acquired else null end), 'dd-Mon-yyyy'), ' ')) as "Latest Date Acquired",

15 sum(decode(code, 'PYTHO', 1, 0)) "PYTHO",

16 decode(emp\_num, null, ' ', nvl(to\_char(max(case when code = 'PYTHO' then date\_acquired else null end), 'dd-Mon-yyyy'), ' ')) as "Latest Date Acquired",

17 sum(decode(code, 'RUBY', 1, 0)) "RUBY",

18 decode(emp\_num, null, ' ', nvl(to\_char(max(case when code = 'RUBY' then date\_acquired else null end), 'dd-Mon-yyyy'), ' ')) as "Latest Date Acquired",

19 sum(decode(code, 'SQL1', 1, 0)) "SQL1",

20 decode(emp\_num, null, ' ', nvl(to\_char(max(case when code = 'SQL1' then date\_acquired else null end), 'dd-Mon-yyyy'), ' ')) as "Latest Date Acquired",

21 sum(decode(code, 'SQL2', 1, 0)) "SQL2",

22 decode(emp\_num, null, ' ', nvl(to\_char(max(case when code = 'SQL2' then date\_acquired else null end), 'dd-Mon-yyyy'), ' ')) as "Latest Date Acquired",

23 count(code)

24 from employee join training using (emp\_num)

25 group by GROUPING SETS ((emp\_num, emp\_first, emp\_last), ());

Latest Latest Latest Latest Latest Latest Latest Latest Latest Latest Number

Date Date Date Date Date Date Date Date Date Date of

ID Employee Name JAVA1 Acquired JAVA2 Acquired J2EE Acquired MOBDA Acquired PRJM1 Acquired PRJM2 Acquired PYTHO Acquired RUBY Acquired SQL1 Acquired SQL2 Acquired Skills

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

1 Jin Blankenship 0 0 0 0 0 0 1 05-Sep-2013 0 0 0 1

7 Fuller Sharp 0 0 0 0 0 0 0 1 05-Sep-2013 0 0 1

8 Maisie Simon 0 0 0 0 0 0 1 05-Sep-2013 0 0 0 1

12 Wynter Holloway 4 05-Sep-2013 0 1 10-May-2013 0 0 0 0 0 0 0 5

13 Margaret Swanson 0 0 0 0 1 06-May-2012 0 0 0 1 11-May-2013 0 2

14 Jolie Acevedo 0 0 1 07-May-2011 0 0 0 0 0 1 12-Nov-2011 0 2

15 Noah Faulkner 1 08-Dec-2011 0 0 1 13-Dec-2011 0 0 0 0 0 0 2

16 Nicole Browning 0 0 1 09-May-2012 3 14-Jul-2013 1 05-Aug-2013 0 0 0 0 0 5

17 Sasha Morrow 0 0 0 0 0 1 05-Sep-2013 0 0 0 0 1

18 Baker Montgomery 1 05-Aug-2013 0 0 0 0 0 0 0 0 0 1

23 Amery Noel 0 0 0 0 0 0 0 0 0 1 05-Aug-2013 1

24 Lane Nguyen 0 0 0 0 0 0 0 0 0 1 05-Sep-2013 1

Number of Trainings 6 0 3 4 2 1 2 1 2 2 23

## Query 9

SQL> SELECT DEPARTMENT.NAME "DEPARTMENT",

2 SKILL.CODE "SKILL", COUNT(TRAIN\_NUM) "TRAIN TIMES",

3 RANK() OVER (PARTITION BY (DEPARTMENT.DEPT\_CODE) ORDER BY COUNT(SKILL.CODE) DESC) AS "DEPT RANK"

4 FROM EMPLOYEE JOIN TRAINING ON EMPLOYEE.EMP\_NUM = TRAINING.EMP\_NUM

5 JOIN SKILL ON SKILL.CODE = TRAINING.CODE

6 JOIN DEPARTMENT ON DEPARTMENT.DEPT\_CODE= EMPLOYEE.DEPT\_CODE

7 GROUP BY DEPARTMENT.DEPT\_CODE, DEPARTMENT.NAME, SKILL.CODE;

DEPARTMENT SKILL TRAIN TIMES DEPT RANK

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

Accounting RUBY 1 1

Accounting PYTHO 1 1

Administration PYTHO 1 1

Human Resource SQL2 2 1

IT Support JAVA1 1 1

IT Support PRJM2 1 1

Operations JAVA1 5 1

Operations MOBDA 4 2

Operations J2EE 3 3

Operations PRJM1 2 4

Operations SQL1 2 4

# The reports created in Part II.C.

## Report 1

SQL> TTITLE 'Employee Information'

SQL> set pagesize 41 linesize 150

SQL> column employee format A18

SQL> column supervisor format A16

SQL> column Skill word\_wrapped format A40

SQL> column Training word\_wrapped format A40

SQL> column Date\_Acquired heading 'Date|Acquired' format A15

SQL> column months heading 'Months|Since|Training' format 999

SQL> break on report on employee skip 1

SQL> compute count label 'Number of Trainings' of training on employee

SQL> select e.emp\_first || ' ' || e.emp\_last as employee,

2 s.emp\_first || ' ' || s.emp\_last as supervisor,

3 t.name training, t.DATE\_ACQUIRED, sk.description as Skill,

4 months\_between(sysdate, t.date\_acquired) months

5 from employee e inner join employee s on e.super\_id = s.emp\_num

6 inner join training t on e.EMP\_NUM = t.EMP\_NUM

7 inner join skill sk on t.code = sk.code

8 order by e.emp\_last;

Sun Apr 27 page 1

Employee Information

Months

Date Since

EMPLOYEE SUPERVISOR TRAINING Acquired SKILL Training

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

Jolie Acevedo Benedict Boyle Struts 07-MAY-11 Java Enterprise Edition - servlets, 36

jsp, servers

Benedict Boyle Mainframe and assembly 12-NOV-11 Basic queries using oracle SQL 29

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

Number of Training 2

Nicole Browning Benedict Boyle IOS Mobile Development 14-MAY-13 Android mobile development 11

Benedict Boyle Black box testing and use cases 09-MAY-12 Java Enterprise Edition - servlets, 24

jsp, servers

Benedict Boyle IOS Mobile Development 14-JUN-13 Android mobile development 10

Benedict Boyle Spring IOC, MVC 05-AUG-13 Project management 1 for PMI 9

certification

Benedict Boyle IOS Mobile Development 14-JUL-13 Android mobile development 9

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

Number of Training 5

Noah Faulkner Benedict Boyle Unit testing and regression testing 08-DEC-11 Basic programming with Java 29

Benedict Boyle Wicket, Thymeleaf 13-DEC-11 Android mobile development 28

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

Number of Training 2

Wynter Holloway Benedict Boyle Struts vs Spring 10-MAY-13 Java Enterprise Edition - servlets, 12

jsp, servers

Benedict Boyle Spring IOC, MVC 05-JUN-13 Basic programming with Java 11

Benedict Boyle Spring IOC, MVC 05-SEP-13 Basic programming with Java 8

Benedict Boyle Spring IOC, MVC 05-AUG-13 Basic programming with Java 9

Benedict Boyle Spring IOC, MVC 05-MAY-13 Basic programming with Java 12

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

Number of Training 5

Sun Apr 27 page 2

Employee Information

Months

Date Since

EMPLOYEE SUPERVISOR TRAINING Acquired SKILL Training

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

Baker Montgomery Eugenia Mcgee Spring IOC, MVC 05-AUG-13 Basic programming with Java 9

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

Number of Training 1

Sasha Morrow Eugenia Mcgee Spring IOC, MVC 05-SEP-13 IT Project mangement for PMI 8

certification

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

Number of Training 1

Lane Nguyen Brendan Alford Spring IOC, MVC 05-SEP-13 Advance qureies using oracle SQL 8

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

Number of Training 1

Amery Noel Brendan Alford Spring IOC, MVC 05-AUG-13 Advance qureies using oracle SQL 9

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

Number of Training 1

Fuller Sharp Kasimir Bean Spring IOC, MVC 05-SEP-13 Web development with Ruby on rails 8

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

Number of Training 1

Maisie Simon Kasimir Bean Spring IOC, MVC 05-SEP-13 Web development with Python 8

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

Number of Training 1

Margaret Swanson Benedict Boyle PPM for PMI Certification 06-MAY-12 Project management 1 for PMI 24

certification

Benedict Boyle Mobile development 11-MAY-13 Basic queries using oracle SQL 12

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

Number of Training 2

22 rows selected.

## Report 2

SQL> set linesize 140 pagesize 60

SQL> clear column

SQL> break on "table\_name" on "column\_name"

SQL> column "table\_name" format A15

SQL> column "column\_name" format A15

SQL> column "constraint\_name" format A30

SQL> column "search\_condition" format A35

SQL> column "reference" format A25

SQL> ttitle 'CONSTRAINTS INFORMATION'

SQL> btitle center 'END OF REPORT'

SQL>

SQL> select utc.table\_name, utc.column\_name,

2 t5.constraint\_name, t5.CONS\_type, t5.search\_condition, t5.reference

3 from user\_tab\_columns utc

4 left join (

5 select T1.table\_name table\_name, T2.column\_name column\_name, T1.constraint\_name constraint\_name,

6 decode(T1.constraint\_type, 'P', 'PK', 'R', 'FK', 'U', 'UK', 'C', 'CK') CONS\_type,

7 T1.search\_condition search\_condition,

8 decode(T3.table\_name, null, null, T3.table\_name || ': ' || T3.column\_name) reference

9 from user\_constraints T1 left outer join user\_cons\_columns T2 on (T1.constraint\_name = T2.constraint\_name)

10 left outer join (

11 select user\_constraints.table\_name, column\_name, constraint\_name

12 from user\_constraints left outer join user\_cons\_columns using (constraint\_name)

13 ) T3 on (T1.r\_constraint\_name = T3.constraint\_name)

14 ) t5 on (utc.table\_name = t5.table\_name and utc.column\_name = t5.column\_name)

15 order by table\_name, column\_id;

Sat Apr 26 page 1

CONSTRAINTS INFORMATION

TABLE\_NAME COLUMN\_NAME CONSTRAINT\_NAME CO SEARCH\_CONDITION REFERENCE

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

ASSIGNMENT ASSIGN\_NUM ASSIGNMENT\_ASSIGNNUM\_PK PK

PROJ\_NUMBER ASSIGNMENT\_MONTHPROJ\_CK UK

ASSIGNMENT\_PROJECTNUMBER\_FK FK PROJECT: PROJ\_NUMBER

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

DATE\_ASSIGNED ASSIGNMENT\_ENDASSIGN\_CK CK Date\_Assigned < Date\_Ended

DATE\_ENDED ASSIGNMENT\_MONTHPROJ\_CK UK

ASSIGNMENT\_ENDASSIGN\_CK CK Date\_Assigned < Date\_Ended

HOURS\_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

EMPLOYEE\_SUPERVISE\_CK CK super\_id != emp\_num

EMP\_LAST

EMP\_FIRST

HIRE\_DATE EMPLOYEE\_AGE\_CK CK ((hire\_date - DOB)/365) > 17

DOB EMPLOYEE\_AGE\_CK CK ((hire\_date - DOB)/365) > 17

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

EMPLOYEE\_SUPERVISE\_CK CK super\_id != emp\_num

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

BONUS

PROJECT PROJ\_NUMBER PROJECT\_PROJNUMBER\_PK PK

NAME

START\_DATE

TOTAL\_COST

DEPT\_CODE PROJECT\_DEPT\_ADMIN\_CK CK Dept\_Code != 'ADMIN'

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 REPORT

MEMORANDUM

ATTENTION: CEO of Homer Consulting

DATE: April 21, 2014

FROM: DB Designers Celine Patag, Sean Hao

SUBJECT: Excessive Costs and Inefficiency at the Hilton Project

The costs of the project *Real Estate Appraisal for Hilton Hotels*is not proportional to its resources and duration. It incurred $439,174 in a limited span of 47 hours. This is the most expensive project of the accounting department, accounting for 43% of the total department cost. Only one employee is allocated to the project. If we compare this to another accounting department project with the same duration, the Hilton project is 8 times more expensive.

Let us review the resource allocation to the project. The project only has one employee allocated to it. The current arrangement is clearly an inefficient use of our resources.  It is likely that the single employee allocated to this project is overworked; which will impact his productivity and motivation, and costs us dearly in overtime hours and eventually employee turnover.

It is suggested that the company policy for resource allocation be reviewed. The basis for determining the number of employees assigned to the project may be the project duration. This is not effective as projects with only one employee assigned tend to incur higher costs. This was identified through the report of the query we designed. The query and its results are included in the next page of this memo.

This query can be used to answer the question what is the cost incurred (including total financial cost and daily cost billed by each employee) by each project in every department? We should include this report in the Quarterly Project Evaluation meeting for it to be discussed.

DB Designers

Celine Patag, Sean Hao

SELECT DEPARTMENT.NAME AS DEPARTMENT, PROJECT.NAME AS PROJECT,

SUM(HOURS\_USED) AS DURATION,

TOTAL\_COST "TOTAL COST", COUNT(EMP\_NUM) "EMPLOYEES#",

TO\_CHAR(TOTAL\_COST/SUM(HOURS\_USED), '$9999999.99') "COST PER HOUR",

TO\_CHAR(TOTAL\_COST/SUM(HOURS\_USED)/COUNT(EMP\_NUM), '$9999999.99') "HOURLY COST PER PERSON"

FROM DEPARTMENT JOIN PROJECT USING (DEPT\_CODE)

JOIN ASSIGNMENT USING (PROJ\_NUMBER)

WHERE PROJECT.START\_DATE > TO\_DATE('1-JAN-2011','DD-MON-YYYY')

GROUP BY DEPARTMENT.NAME, PROJECT.NAME, PROJECT.START\_DATE, TOTAL\_COST

HAVING MAX(ASSIGNMENT.DATE\_ENDED) < TO\_DATE('31-DEC-2014','DD-MON-YYYY')

ORDER BY DEPARTMENT, TOTAL\_COST DESC;

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TOTAL COST PER DEPARTMENT

FROM JANUARY 1, 2011 TO DECEMBER 31, 2014

DURATION HOURLY COST

DEPARTMENT PROJECT (IN HOURS) TOTAL COST EMPLOYEES# COST PER HOUR PER PERSON

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Accounting Option pricer calculator algorithm design 700 2

Real Estate Appraisal for Hilton Hotels 47 $439174 1 $9344.13 $9344.13

Pointwest Technologies Disaster Mangement System 320 $327130 2 $1022.28 $511.14

Proctor and Gable Enterprise Resouce Management 320 $198570 2 $620.53 $310.27

Collateral Valuation - BDO 47 $53333 1 $1134.74 $1134.74

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TOTAL DEPARTMENT COST $1018207

Human Resource Novare Staff Right Sizing 320 $350786 2 $1096.21 $548.10

Ayala Technologies Effective Recruitment 320 $340603 2 $1064.38 $532.19

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TOTAL DEPARTMENT COST $691389

IT Support AtCMUA Android mobile application development 620 2

Universal Robina Just In Time Inventory 320 $533122 2 $1666.01 $833.00

Big Pond CMMI Audit 320 $442094 2 $1381.54 $690.77

Seven Seven Disaster Risk Assessment 320 $429574 2 $1342.42 $671.21

Navitaire CMMI Audit 320 $382475 2 $1195.23 $597.62

Database Configuration - SSS 509 $327130 4 $642.69 $160.67

Ratatouille Kiosk and Web Checkin 247 $313589 2 $1269.59 $634.80

Champ Cargosystem Lux 320 $313589 2 $979.97 $489.98

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TOTAL DEPARTMENT COST $2741573

Operations Feasibility Study on Waste Management in Manila 160 $439374 1 $2746.09 $2746.09

Automatic Appraisal System 261 $340603 1 $1304.99 $1304.99

Work Flow Simulation of Soybean Factory 230 $198570 2 $863.35 $431.67

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TOTAL DEPARTMENT COST $978547

END OF REPORT- RUN BY: HOMER