

DATABASE MANAGEMENT (95-703)

DB IMPLEMENTATION PROJECT
Fall 2021

Under guidance of:
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GROUP:

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PART II

A.

1.Script #1 - Table Creation

```
DROP TABLE skill CASCADE CONSTRAINTS;
DROP TABLE department CASCADE CONSTRAINTS;
DROP TABLE employee CASCADE CONSTRAINTS;
DROP TABLE training CASCADE CONSTRAINTS;
DROP TABLE client CASCADE CONSTRAINTS;
DROP TABLE project CASCADE CONSTRAINTS;
DROP TABLE assignment CASCADE CONSTRAINTS;
```

```
CREATE TABLE skill
( Code NUMBER(4),
  Name VARCHAR2(30) CONSTRAINT skill_name_NN NOT NULL,
  Category VARCHAR2(20) CONSTRAINT skill_category_NN NOT NULL,
  CONSTRAINT skill_code_PK PRIMARY KEY (Code)
);
```

```
CREATE TABLE department
( Dept_Code NUMBER(4),
  Name VARCHAR2(30) CONSTRAINT department_name_NN NOT NULL,
  Location VARCHAR2(20) CONSTRAINT department_location_NN NOT NULL,
  Phone VARCHAR2(12),
  Manager_ID NUMBER(4),
  CONSTRAINT department_dept_code_PK PRIMARY KEY (Dept_Code),
  CONSTRAINT department_phone_CK CHECK (REGEXP_LIKE (Phone, '^([0-9]{3}-[0-9]{3}-[0-9]{4})$'))
);
```

```
CREATE TABLE employee
( Emp_Num NUMBER(4),
  LName VARCHAR2(15) CONSTRAINT employee_lname_NN NOT NULL,
  FName VARCHAR2(15) CONSTRAINT employee_fname_NN NOT NULL,
  DOB DATE,
```

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Hire_Date DATE DEFAULT SYSDATE,
Super_ID NUMBER(4),
Dept_Code NUMBER(4),
CONSTRAINT employee_emp_num_PK PRIMARY KEY (Emp_Num),
CONSTRAINT employee_super_id_FK FOREIGN KEY(Super_ID) REFERENCES employee(Emp_Num),
CONSTRAINT employee_dept_code_FK FOREIGN KEY(Dept_Code) REFERENCES department(Dept_Code),
CONSTRAINT employee_dob_CK CHECK (REGEXP_LIKE (DOB, '^[0-9]{2}[-][a-zA-Z]{3}[-][0-9]{2})$'),
CONSTRAINT employee_hire_date_CK CHECK (REGEXP_LIKE (Hire_Date, '^[0-9]{2}[-][a-zA-Z]{3}[-][0-9]{2})$'))
);

```

```

CREATE TABLE training
( Train_Num NUMBER(4),
  Code NUMBER(4),
  Emp_Num NUMBER(4),
  Name VARCHAR2(30) CONSTRAINT training_name_NN NOT NULL,
  Date_Acquired DATE DEFAULT SYSDATE,
  Comments VARCHAR2(50),
  CONSTRAINT training_train_num_PK PRIMARY KEY (Train_Num),
  CONSTRAINT training_code_FK FOREIGN KEY(Code) REFERENCES skill(Code),
  CONSTRAINT training_emp_num_FK FOREIGN KEY(Emp_Num) REFERENCES employee(Emp_Num),
  CONSTRAINT training_date_acquired_CK CHECK (REGEXP_LIKE (Date_Acquired,
'^([0-9]{2}[-][a-zA-Z]{3}[-][0-9]{2})$'))
);

```

```

CREATE TABLE client
( Client_ID NUMBER(4),
  Name VARCHAR2(30) CONSTRAINT client_name_NN NOT NULL,
  Street VARCHAR2(30) CONSTRAINT client_street_NN NOT NULL,
  City VARCHAR2(20) CONSTRAINT client_city_NN NOT NULL,
  State VARCHAR2(2) CONSTRAINT client_state_NN NOT NULL,
  Zip_Code VARCHAR2(5),
  Industry VARCHAR2(30) CONSTRAINT client_industry_NN NOT NULL,
  Web_Address VARCHAR2(30) CHECK (REGEXP_LIKE (Web_Address, '^([www]{3}.[a-zA-Z0-9]+.[a-z]{3})$')),

```

```

Phone VARCHAR2(12) CHECK(REGEXP_LIKE (Phone, '^[0-9]{3}[-][0-9]{3}[-][0-9]{4})$')),
Contact_LName VARCHAR2(30) CONSTRAINT contact_lname_NN NOT NULL,
Contact_FName VARCHAR2(30) CONSTRAINT contact_fname_NN NOT NULL,
CONSTRAINT client_client_id_PK PRIMARY KEY (Client_ID),
CONSTRAINT client_state_CK CHECK (LENGTH(State) = 2),
CONSTRAINT client_zip_code_CK CHECK (LENGTH(Zip_Code) = 5)
);

CREATE TABLE project
( Proj_Number NUMBER(4),
  Name VARCHAR2(30) CONSTRAINT project_name_NN NOT NULL,
  Start_Date DATE DEFAULT SYSDATE,
  Total_Cost NUMBER(5),
  Dept_Code NUMBER(4),
  Client_ID NUMBER(4),
  Code NUMBER(4),
  CONSTRAINT project_number_PK PRIMARY KEY (Proj_Number),
  CONSTRAINT project_dept_code_FK FOREIGN KEY(Dept_Code) REFERENCES department(Dept_Code),
  CONSTRAINT project_client_id_FK FOREIGN KEY(Client_ID) REFERENCES client(Client_ID),
  CONSTRAINT project_code_FK FOREIGN KEY(Code) REFERENCES skill(Code),
  CONSTRAINT project_date_CK CHECK (REGEXP_LIKE (Start_Date, '^[0-9]{2}[-][a-zA-Z]{3}[-][0-9]{2})$'))
);

CREATE TABLE assignment
( Assign_Num NUMBER(4),
  Proj_Number NUMBER(4),
  Emp_Num NUMBER(4),
  Date_Assigned DATE DEFAULT SYSDATE,
  Date_Ended DATE,
  Hours_Used NUMBER(4),
  CONSTRAINT assignment_assign_num_PK PRIMARY KEY (Assign_Num),
  CONSTRAINT assignment_proj_number_FK FOREIGN KEY(Proj_Number) REFERENCES project(Proj_Number),
  CONSTRAINT assignment_assign_emp_num_FK FOREIGN KEY(Emp_Num) REFERENCES employee(Emp_Num),
  CONSTRAINT assignment_date_assigned_CK CHECK (REGEXP_LIKE (Date_Assigned,
'^([0-9]{2}[-][a-zA-Z]{3}[-][0-9]{2})$')),

```

```
CONSTRAINT assignment_date_ended_CHK CHECK (REGEXP_LIKE (Date_Ended,  
'^([0-9]{2}[-][a-zA-Z]{3}[-][0-9]{2})$')),  
CONSTRAINT assignment_check_date CHECK (Date_Ended > Date_Assigned)  
);
```

```
ALTER TABLE department  
ADD CONSTRAINT department_manager_id_FK  
FOREIGN KEY (Manager_ID)  
REFERENCES employee (Emp_Num);
```

Assuming clients will be domestic clients based in the US, constraints on Zip Code and State are added.

2.Script #2 - Data insertion

SKILL INSERT

```
INSERT INTO SKILL VALUES ( 1009 , 'Cash Flows','Accounting');
INSERT INTO SKILL VALUES ( 1004 , 'Admin Report','Administrative');
INSERT INTO SKILL VALUES ( 1017 , 'Master Advertising','Advertising');
INSERT INTO SKILL VALUES ( 1020 , 'Creative Thinking','Consulting');
INSERT INTO SKILL VALUES ( 1021 , 'Problem-solving','Consulting');
INSERT INTO SKILL VALUES ( 1022 , 'Advanced Consulting','Consulting');
INSERT INTO SKILL VALUES ( 1023 , 'Analytical Thinking','Consulting');
INSERT INTO SKILL VALUES ( 1010 , 'SAS','Data Analysis');
INSERT INTO SKILL VALUES ( 1015 , 'SQL','Data Analysis');
INSERT INTO SKILL VALUES ( 1016 , 'R tools','Data Analysis');
INSERT INTO SKILL VALUES ( 1001 , 'Financial Management','Finance');
INSERT INTO SKILL VALUES ( 1003 , 'Communication','Human Resource');
INSERT INTO SKILL VALUES ( 1011 , 'Application Development','IT');
INSERT INTO SKILL VALUES ( 1012 , 'Artificial Intelligence','IT');
INSERT INTO SKILL VALUES ( 1013 , 'HTML','IT');
INSERT INTO SKILL VALUES ( 1014 , 'Java','IT');
INSERT INTO SKILL VALUES ( 1019 , 'Contract Details','Legal');
INSERT INTO SKILL VALUES ( 1002 , 'Marketing','Marketing');
INSERT INTO SKILL VALUES ( 1005 , 'Networking','Marketing');
INSERT INTO SKILL VALUES ( 1006 , 'Customer Service','Marketing');
INSERT INTO SKILL VALUES ( 1018 , 'PR Communication','Public Relations');
INSERT INTO SKILL VALUES ( 1007 , 'Tableau','Sales');
INSERT INTO SKILL VALUES ( 1008 , 'Sales Tricks','Sales');
```

DEPARTMENT INSERT

```
INSERT INTO DEPARTMENT VALUES (503,'Finance','Floor 1, Rm. 1','520-757-6805',NULL);
INSERT INTO DEPARTMENT VALUES (504,'Marketing','Floor 1, Rm. 2','738-975-4415',NULL);
INSERT INTO DEPARTMENT VALUES (505,'Consulting','Floor 1, Rm. 3','463-994-3450',NULL);
INSERT INTO DEPARTMENT VALUES (506,'Data Analysis','Floor 1, Rm. 4','430-903-2038',NULL);
INSERT INTO DEPARTMENT VALUES (507,'IT','Floor 1, Rm. 5','959-979-6535',NULL);
INSERT INTO DEPARTMENT VALUES (508,'Sales','Floor 2, Rm. 1','313-995-4051',NULL);
INSERT INTO DEPARTMENT VALUES (509,'Advertising','Floor 2, Rm. 2','785-312-2397',NULL);
INSERT INTO DEPARTMENT VALUES (510,'Human Resource','Floor 2, Rm. 3','611-871-2471',NULL);
INSERT INTO DEPARTMENT VALUES (511,'Accounting','Floor 2, Rm. 4','379-490-7683',NULL);
INSERT INTO DEPARTMENT VALUES (512,'Administrative','Floor 2, Rm. 5','529-407-8757',NULL);
INSERT INTO DEPARTMENT VALUES (513,'Public Relations','Floor 3, Rm. 1','482-287-3227',NULL);
INSERT INTO DEPARTMENT VALUES (514,'Legal','Floor 3, Rm. 2','702-647-5711',NULL);
```

CLIENT INSERT

```
INSERT INTO CLIENT VALUES (901,'Price Pantheon','Revolution
Passage','Tulsa','SD','74157','Retail','www.pap.com','303-693-3216','Kirk','Esmeralda');
INSERT INTO CLIENT VALUES (902,'Albury Wholesale','Liberty
Way','Danbury','CT','06810','Retail','www.awh.com','278-558-3007','Rowe','Phoebe');
INSERT INTO CLIENT VALUES (903,'Frugal Foods Retail','College
Boulevard','Englishtown','NJ','07726','Retail','www.ffr.com','439-404-4405','Dalton','Emilee');
INSERT INTO CLIENT VALUES (904,'Dawn Auto','Beach
Row','Nampa','ID','83651','Auto','www.da.com','280-412-2771','Richard','Hector');
INSERT INTO CLIENT VALUES (905,'Bossel Market Group','Sugarplum
Street','Lemont','IL','60439','Education','www.bmg.edu','263-355-1501','Pineda','Jeremy');
INSERT INTO CLIENT VALUES (906,'LJ Smith Retail','Angel
Lane','Brownsburg','IN','46112','Retail','www.lsr.com','784-881-8630','Berg','Holden');
INSERT INTO CLIENT VALUES (907,'Melby Design','Jade
Way','Albany','NY','12203','Design','www.md.com','325-357-3280','Oliver','Pedro');
INSERT INTO CLIENT VALUES (908,'Cheyenne Hardware','Spring
Way','Duluth','GA','30096','Furniture','www.ch.com','681-343-5592','Wu','Antwan');
```

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INSERT INTO CLIENT VALUES (909,'Red Hill Services','Great Street','Zanesville','OH','43701','Event
Services','www.rhs.com','201-242-8791','Whitney','Bethany');
INSERT INTO CLIENT VALUES (910,'Adeptiweb','Penrose
Avenue','Sandusky','OH','44870','IT','www.aweb.com','420-953-3968','Moreno','Shaun');
INSERT INTO CLIENT VALUES (911,'Sewal Tech','Elm
Lane','Shakopee','MN','55379','Government','www.st.gov','876-894-2445','Oconnell','Nehemiah');
INSERT INTO CLIENT VALUES (912,'Robey Technology','Marine
Lane','Eastpointe','MI','48021','IT','www.rt.com','871-798-0459','Adams','Kali');
INSERT INTO CLIENT VALUES (913,'Reneman Motor','Emerald Route','Howard
Beach','NY','11414','Auto','www.sm.com','589-951-1711','Maxwell','Selena');
INSERT INTO CLIENT VALUES (914,'Electibar','Congress Boulevard','Kearny','NJ','63856','NP
Organization','www.eb.org','585-403-7395','Shannon','Finley');
INSERT INTO CLIENT VALUES (915,'Honey Beauty Market','Bard
Way','Hempstead','NY','11550','Retail','www.hbm.com','516-789-1188','Harmon','Meadow');
INSERT INTO CLIENT VALUES (916,'Gpit','Bower
Way','Richmond','NY','11418','Fashion',NULL,'506-234-6433','Robinson','Lucy');
INSERT INTO CLIENT VALUES (917,'HG Connect','St.Helen','La
Porte','IN','46350','Phone','www.hgC.net','554-634-2643','Hanson','Amy');
INSERT INTO CLIENT VALUES (918,'Luminus','Robin
Street','Erlanger','KY','41018','Light','www.LM.net','654-456-2346','Palle','Bob');
INSERT INTO CLIENT VALUES (919,'BBCosmetics','Forbes
Ave','Cranford','NJ','07016','Cosmetics',NULL,'673-463-3634','Winters','Charles');

```

EMPLOYEE INSERT

```

INSERT INTO EMPLOYEE VALUES (107,'Wise','Ben','31-May-64','04-Sep-00',NULL,512);
INSERT INTO EMPLOYEE VALUES (138,'Macias','Kaylyn','19-Jul-71','23-Oct-05',107,511);
INSERT INTO EMPLOYEE VALUES (103,'Leverling','Janet','10-Jan-72','05-Apr-05',107,512);
INSERT INTO EMPLOYEE VALUES (130,'Huynh','Valery','09-Jan-79','03-May-06',107,509);
INSERT INTO EMPLOYEE VALUES (122,'Blanchard','Rubi','01-Sep-79','28-May-06',107,505);
INSERT INTO EMPLOYEE VALUES (108,'West','Jeremiah','10-Nov-71','04-Feb-05',107,506);
INSERT INTO EMPLOYEE VALUES (118,'Ali','Jan','08-Sep-72','10-Sep-05',107,503);
INSERT INTO EMPLOYEE VALUES (134,'Cooke','Pierre','09-Jan-73','09-Oct-05',107,510);
INSERT INTO EMPLOYEE VALUES (101,'Fuller','Andrew','31-Jan-74','28-Nov-05',107,507);
INSERT INTO EMPLOYEE VALUES (146,'Hudson','Nash','23-Jul-74','10-Jan-06',107,514);

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INSERT INTO EMPLOYEE VALUES (111,'Pitts','Gruffydd','07-Aug-76','15-Mar-06',107,504);
INSERT INTO EMPLOYEE VALUES (142,'Jarvis','Nathalia','02-May-77','24-Mar-06',107,513);
INSERT INTO EMPLOYEE VALUES (126,'Rivers','Jameson','26-Feb-81','10-Jan-06',107,508);
INSERT INTO EMPLOYEE VALUES (139,'Vazquez','Ethan','26-Feb-81','14-Oct-05',138,511);
INSERT INTO EMPLOYEE VALUES (104,'Peacock','Margaret','23-Apr-84','22-Mar-06',103,512);
INSERT INTO EMPLOYEE VALUES (131,'Whitaker','Alexus','28-May-84','06-Apr-06',130,509);
INSERT INTO EMPLOYEE VALUES (123,'Cordova','Sanai','15-Jan-85','07-Jun-06',122,505);
INSERT INTO EMPLOYEE VALUES (109,'Iles','Anika','06-Sep-80','27-Nov-05',108,506);
INSERT INTO EMPLOYEE VALUES (119,'Ford','Keon','15-Jun-80','06-Jun-06',118,503);
INSERT INTO EMPLOYEE VALUES (135,'Curry','Landin','28-Feb-86','09-Aug-06',134,510);
INSERT INTO EMPLOYEE VALUES (102,'Davolio','Nancy','22-Dec-85','23-Jun-06',101,507);
INSERT INTO EMPLOYEE VALUES (147,'Becker','Regina','02-Oct-83','18-Mar-06',146,514);
INSERT INTO EMPLOYEE VALUES (112,'Rayner','Clyde','08-Jan-81','31-Dec-05',111,504);
INSERT INTO EMPLOYEE VALUES (143,'Rojas','Parker','26-Jan-83','05-Feb-06',142,513);
INSERT INTO EMPLOYEE VALUES (127,'Coleman','Landon','24-Dec-84','28-May-06',126,508);
INSERT INTO EMPLOYEE VALUES (140,'Harris','Chasity','10-Apr-93','05-Aug-17',139,511);
INSERT INTO EMPLOYEE VALUES (141,'Shaffer','Kamora','28-Oct-93','01-Dec-18',139,511);
INSERT INTO EMPLOYEE VALUES (106,'Suyama','Michael','31-Aug-86','20-Aug-06',104,512);
INSERT INTO EMPLOYEE VALUES (115,'Arnold','Hermione','16-Nov-93','04-Jan-18',104,512);
INSERT INTO EMPLOYEE VALUES (133,'Costa','Khloe','18-Apr-88','17-Apr-09',131,509);
INSERT INTO EMPLOYEE VALUES (132,'Valdez','Davis','03-May-88','18-May-11',131,509);
INSERT INTO EMPLOYEE VALUES (125,'Melton','Marcelo','09-Jun-86','18-Aug-06',123,505);
INSERT INTO EMPLOYEE VALUES (124,'Rivera','Jared','23-May-89','07-Jun-13',123,505);
INSERT INTO EMPLOYEE VALUES (110,'Schofield','Mikayla','02-May-88','28-Mar-10',109,506);
INSERT INTO EMPLOYEE VALUES (117,'Travis','Veronica','20-Jan-93','25-Dec-17',109,506);
INSERT INTO EMPLOYEE VALUES (120,'Woodard','Micaela','06-Jan-88','27-Mar-09',119,503);
INSERT INTO EMPLOYEE VALUES (121,'Fry','Saige','16-Nov-89','10-Jun-14',119,503);
INSERT INTO EMPLOYEE VALUES (136,'Sullivan','Julien','05-Aug-87','08-Oct-08',135,510);
INSERT INTO EMPLOYEE VALUES (137,'Harding','Summer','13-Feb-93','27-Jun-17',135,510);
INSERT INTO EMPLOYEE VALUES (116,'Weaver','Sanai','08-May-87','25-May-08',102,507);
INSERT INTO EMPLOYEE VALUES (105,'Buchanan','Steven','12-Feb-93','30-Mar-17',102,507);
INSERT INTO EMPLOYEE VALUES (148,'Graham','Barbara','10-Feb-90','13-Aug-14',147,514);
INSERT INTO EMPLOYEE VALUES (149,'Yoder','Lizeth','29-Nov-93','29-Aug-18',147,514);
INSERT INTO EMPLOYEE VALUES (114,'Bartlett','Kellan','01-Dec-86','10-Apr-06',112,504);
INSERT INTO EMPLOYEE VALUES (113,'Harper','Elaine','27-Sep-91','25-Oct-15',112,504);
INSERT INTO EMPLOYEE VALUES (144,'Buchanan','Nathalie','29-May-88','28-Jul-11',143,513);

```

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INSERT INTO EMPLOYEE VALUES (145,'Gates','Jaslene','08-Aug-90','17-Oct-15',143,513);
INSERT INTO EMPLOYEE VALUES (128,'Silva','Elliot','31-Aug-89','28-Jan-14',127,508);
INSERT INTO EMPLOYEE VALUES (129,'Nolan','Casey','03-Oct-93','16-Jan-18',127,508);
INSERT INTO EMPLOYEE VALUES (150,'Park','Coby','25-Apr-93','01-Apr-21',104,512);
INSERT INTO EMPLOYEE VALUES (151,'Johnson','Amy','31-Aug-89','02-Apr-21',104,512);
INSERT INTO EMPLOYEE VALUES (152,'Clay','Sarah','20-Nov-92','03-Apr-21',104,512);
INSERT INTO EMPLOYEE VALUES (153,'Smith','Jack','11-Oct-90','04-Mar-21',104,512);
INSERT INTO EMPLOYEE VALUES (154 , 'Johanson','Jamie','05-Aug-89','20-Apr-21',123,505);

```

```

UPDATE department SET Manager_id = 118 WHERE Dept_Code = 503;
UPDATE department SET Manager_id = 111 WHERE Dept_Code = 504;
UPDATE department SET Manager_id = 122 WHERE Dept_Code = 505;
UPDATE department SET Manager_id = 108 WHERE Dept_Code = 506;
UPDATE department SET Manager_id = 101 WHERE Dept_Code = 507;
UPDATE department SET Manager_id = 126 WHERE Dept_Code = 508;
UPDATE department SET Manager_id = 130 WHERE Dept_Code = 509;
UPDATE department SET Manager_id = 134 WHERE Dept_Code = 510;
UPDATE department SET Manager_id = 138 WHERE Dept_Code = 511;
UPDATE department SET Manager_id = 103 WHERE Dept_Code = 512;
UPDATE department SET Manager_id = 142 WHERE Dept_Code = 513;
UPDATE department SET Manager_id = 146 WHERE Dept_Code = 514;

```

TRAINING INSERT

```

INSERT INTO TRAINING VALUES (7389,1004,106,'Coursework','11-Jan-19','Completed with A');
INSERT INTO TRAINING VALUES (7415,1004,115,'Technical Training','21-Jan-19','Completed with A-');
INSERT INTO TRAINING VALUES (7414,1017,132,'Workshop','04-Feb-19','Completed with A');
INSERT INTO TRAINING VALUES (7395,1022,124,'Coursework','15-Feb-19','Completed with B+');
INSERT INTO TRAINING VALUES (7422,1022,125,'Coursework','18-Feb-19','Completed with B');
INSERT INTO TRAINING VALUES (7396,1023,125,'Coursework','19-Feb-19','Completed with A');
INSERT INTO TRAINING VALUES (7402,1011,105,'Coursework','21-Feb-19','Completed with A-');
INSERT INTO TRAINING VALUES (7408,1005,113,'Workshop','22-Feb-19','Completed with A-');
INSERT INTO TRAINING VALUES (7410,1018,144,'Technical Training','25-Feb-19','Completed with B+');

```

```
INSERT INTO TRAINING VALUES (7423,1011,116,'Coursework','04-Mar-19','Completed with B+');
INSERT INTO TRAINING VALUES (7421,1018,145,'Technical Training','05-Mar-19','Completed with B');
INSERT INTO TRAINING VALUES (7394,1021,125,'Technical Training','06-Mar-19','Completed with A');
INSERT INTO TRAINING VALUES (7403,1012,105,'Coursework','08-Mar-19','Completed with B');
INSERT INTO TRAINING VALUES (7413,1012,102,'Coursework','14-Mar-19','Completed with A');
INSERT INTO TRAINING VALUES (7387,1009,140,'Coursework','15-Mar-19','Completed with A-');
INSERT INTO TRAINING VALUES (7416,1009,141,'Coursework','22-Mar-19','Completed with B+');
INSERT INTO TRAINING VALUES (7417,1021,124,'Technical Training','22-Mar-19','Completed with A-');
INSERT INTO TRAINING VALUES (7401,1003,136,'Coursework','25-Mar-19','Completed with B');
INSERT INTO TRAINING VALUES (7399,1016,110,'Technical Training','03-Apr-19','Completed with B+');
INSERT INTO TRAINING VALUES (7420,1003,137,'Coursework','04-Apr-19','Completed with A');
INSERT INTO TRAINING VALUES (7424,1016,117,'Technical Training','04-Apr-19','Completed with B');
INSERT INTO TRAINING VALUES (7406,1019,148,'Workshop','08-Apr-19','Completed with A-');
INSERT INTO TRAINING VALUES (7412,1008,128,'Technical Training','10-Apr-19','Completed with A');
INSERT INTO TRAINING VALUES (7393,1020,124,'Workshop','10-Apr-19','Completed with B+');
INSERT INTO TRAINING VALUES (7419,1008,129,'Technical Training','15-Apr-19','Completed with A-');
INSERT INTO TRAINING VALUES (7409,1006,114,'Workshop','16-Apr-19','Completed with B');
INSERT INTO TRAINING VALUES (7397,1010,110,'Technical Training','26-Apr-19','Completed with B+');
INSERT INTO TRAINING VALUES (7418,1006,113,'Workshop','29-Apr-19','Completed with A');
INSERT INTO TRAINING VALUES (7400,1001,120,'Workshop','01-May-19','Completed with A-');
INSERT INTO TRAINING VALUES (7427,1010,117,'Technical Training','15-May-19','Completed with B');
INSERT INTO TRAINING VALUES (7404,1013,105,'Workshop','16-May-19','Completed with B+');
INSERT INTO TRAINING VALUES (7398,1015,117,'Technical Training','16-May-19','Completed with A');
INSERT INTO TRAINING VALUES (7411,1007,129,'Technical Training','22-May-19','Completed with A-');
INSERT INTO TRAINING VALUES (7426,1013,116,'Workshop','27-May-19','Completed with B');
INSERT INTO TRAINING VALUES (7405,1014,105,'Technical Training','30-May-19','Completed with A');
INSERT INTO TRAINING VALUES (7425,1014,116,'Technical Training','31-May-19','Completed with A-');
INSERT INTO TRAINING VALUES (7407,1002,137,'Workshop','04-Jun-19','Completed with B+');
INSERT INTO TRAINING VALUES (7391,1017,133,'Workshop','25-Jun-19','Completed with B');
INSERT INTO TRAINING VALUES (7428,1004,150,'Coursework','01-Jul-21','Completed with A-');
INSERT INTO TRAINING VALUES (7429,1001,102,'Workshop','08-Mar-21','Completed with A');
INSERT INTO TRAINING VALUES (7438,1002,125,'Workshop','02-Jan-20','Completed with B+');
INSERT INTO TRAINING VALUES (7443,1003,116,'Coursework','13-Aug-21','Completed with A-');
INSERT INTO TRAINING VALUES (7430,1004,117,'Technical Training','09-Apr-20','Completed with B');
INSERT INTO TRAINING VALUES (7436,1004,115,'Technical Training','14-Sep-20','Completed with B+');
INSERT INTO TRAINING VALUES (7447,1006,120,'Workshop','09-Jul-20','Completed with A');
```

```

INSERT INTO TRAINING VALUES (7442,1007,133,'Technical Training','16-Feb-21','Completed with A-');
INSERT INTO TRAINING VALUES (7432,1009,113,'Coursework','22-Apr-20','Completed with B');
INSERT INTO TRAINING VALUES (7450,1009,117,'Coursework','20-Sep-19','Completed with B+');
INSERT INTO TRAINING VALUES (7441,1010,136,'Technical Training','14-Sep-21','Completed with A');
INSERT INTO TRAINING VALUES (7446,1010,124,'Technical Training','25-Jan-21','Completed with A-');
INSERT INTO TRAINING VALUES (7434,1011,114,'Coursework','06-Apr-20','Completed with B');
INSERT INTO TRAINING VALUES (7445,1012,117,'Coursework','24-Jun-21','Completed with A');
INSERT INTO TRAINING VALUES (7452,1012,148,'Coursework','09-Dec-20','Completed with A-');
INSERT INTO TRAINING VALUES (7439,1013,125,'Workshop','25-Jun-20','Completed with B+');
INSERT INTO TRAINING VALUES (7433,1014,106,'Technical Training','03-Nov-20','Completed with B');
INSERT INTO TRAINING VALUES (7448,1014,140,'Technical Training','08-Jul-21','Completed with A-');
INSERT INTO TRAINING VALUES (7437,1016,105,'Technical Training','30-Oct-19','Completed with A');
INSERT INTO TRAINING VALUES (7440,1016,137,'Technical Training','26-Jul-19','Completed with B+');
INSERT INTO TRAINING VALUES (7449,1017,144,'Workshop','23-Apr-21','Completed with A-');
INSERT INTO TRAINING VALUES (7451,1018,125,'Technical Training','23-Nov-20','Completed with B');
INSERT INTO TRAINING VALUES (7435,1021,116,'Technical Training','14-Dec-20','Completed with B+');
INSERT INTO TRAINING VALUES (7444,1004,151,'Coursework','04-Aug-21','Completed with A');
INSERT INTO TRAINING VALUES (7453,1004,152,'Coursework','24-Aug-21','Completed with A-');
INSERT INTO TRAINING VALUES (7431,1004,153,'Coursework','16-Jul-21','Completed with B');
INSERT INTO TRAINING VALUES (7454,1020,154,'Workshop','20-May-21','Completed with A');

```

PROJECT INSERT

```

INSERT INTO PROJECT VALUES (8801,'PP Consulting Project','01-Aug-19',50601,505,901,1022);
INSERT INTO PROJECT VALUES (8802,'AA Web Develop','30-Aug-19',40684,507,902,1013);
INSERT INTO PROJECT VALUES (8803,'FFR Advertise','01-Nov-19',51354,509,903,1017);
INSERT INTO PROJECT VALUES (8804,'DA Consulting Project','01-May-20',34412,505,904,1020);
INSERT INTO PROJECT VALUES (8805,'BMG Consulting Project','01-Jun-20',45154,505,905,1020);
INSERT INTO PROJECT VALUES (8806,'LSR Financial Analysis','03-Aug-20',35518,503,906,1001);
INSERT INTO PROJECT VALUES (8807,'MD Sales Campaign','01-Sep-20',89975,508,907,1007);
INSERT INTO PROJECT VALUES (8808,'CH Consulting Project','01-Sep-20',64513,505,908,1021);
INSERT INTO PROJECT VALUES (8809,'RH Consulting Project','01-Oct-20',81564,505,909,1022);
INSERT INTO PROJECT VALUES (8810,'Aweb Web Development','02-Nov-20',84234,507,910,1014);
INSERT INTO PROJECT VALUES (8811,'ST Database Project','01-Mar-21',41156,506,911,1015);

```

```

INSERT INTO PROJECT VALUES (8812,'RT PR Campaign','01-Apr-21',54803,513,912,1018);
INSERT INTO PROJECT VALUES (8813,'RM Consulting Project','01-Jul-21',64238,505,913,1020);
INSERT INTO PROJECT VALUES (8814,'EL Contract Review','02-Aug-21',NULL,514,914,1019);
INSERT INTO PROJECT VALUES (8815,'HBM Annual Report','01-Dec-21',NULL,511,915,1009);
INSERT INTO PROJECT VALUES (8816,'PPSales Campaign','01-Dec-21',NULL,508,907,1007);
INSERT INTO PROJECT VALUES (8817,'AA Financial Analysis','01-Dec-21',NULL,503,906,1001);
INSERT INTO PROJECT VALUES (8818,'ST AI Project','01-Feb-21',49536,507,911,1012);
INSERT INTO PROJECT VALUES (8819,'BMG AI Usage','01-Mar-21',84234,507,905,1012);
INSERT INTO PROJECT VALUES (8820,'LSR Consulting','02-Aug-21',56543,505,906,1020);
INSERT INTO PROJECT VALUES (8821,'LSR Sales','01-Dec-21',NULL,508,906,1007);

```

ASSIGNMENT INSERT

```

INSERT INTO ASSIGNMENT VALUES (9000,8801,124,'01-Aug-19','30-Aug-19',180);
INSERT INTO ASSIGNMENT VALUES (9001,8801,124,'03-Sep-19','30-Sep-19',160);
INSERT INTO ASSIGNMENT VALUES (9002,8802,116,'03-Sep-19','30-Sep-19',180);
INSERT INTO ASSIGNMENT VALUES (9003,8803,133,'04-Nov-19','18-Nov-19',128);
INSERT INTO ASSIGNMENT VALUES (9004,8803,132,'04-Nov-19','18-Nov-19',128);
INSERT INTO ASSIGNMENT VALUES (9005,8804,124,'04-May-20','25-May-20',160);
INSERT INTO ASSIGNMENT VALUES (9006,8805,124,'01-Jun-20','18-Jun-20',144);
INSERT INTO ASSIGNMENT VALUES (9007,8806,120,'03-Aug-20','28-Aug-20',180);
INSERT INTO ASSIGNMENT VALUES (9008,8807,129,'01-Sep-20','20-Sep-20',160);
INSERT INTO ASSIGNMENT VALUES (9009,8808,125,'01-Sep-20','21-Sep-20',152);
INSERT INTO ASSIGNMENT VALUES (9010,8808,124,'04-Sep-20','18-Sep-20',120);
INSERT INTO ASSIGNMENT VALUES (9011,8808,125,'01-Oct-20','15-Oct-20',120);
INSERT INTO ASSIGNMENT VALUES (9012,8809,125,'03-Oct-20','30-Oct-20',170);
INSERT INTO ASSIGNMENT VALUES (9013,8809,125,'02-Nov-20','30-Nov-20',170);
INSERT INTO ASSIGNMENT VALUES (9014,8809,125,'01-Dec-20','31-Dec-20',170);
INSERT INTO ASSIGNMENT VALUES (9015,8809,124,'01-Oct-20','31-Oct-20',170);
INSERT INTO ASSIGNMENT VALUES (9016,8809,124,'02-Nov-20','30-Nov-20',170);
INSERT INTO ASSIGNMENT VALUES (9017,8809,124,'01-Dec-20','31-Dec-20',170);
INSERT INTO ASSIGNMENT VALUES (9018,8809,124,'04-Jan-21','31-Jan-21',170);
INSERT INTO ASSIGNMENT VALUES (9019,8809,124,'01-Feb-21','28-Feb-21',170);
INSERT INTO ASSIGNMENT VALUES (9020,8809,124,'01-Mar-21','31-Mar-21',170);
INSERT INTO ASSIGNMENT VALUES (9021,8810,105,'02-Nov-20','20-Nov-20',160);

```

```
INSERT INTO ASSIGNMENT VALUES (9022,8810,116,'02-Nov-20','20-Nov-20',160);
INSERT INTO ASSIGNMENT VALUES (9023,8811,117,'01-Mar-21','30-Mar-21',155);
INSERT INTO ASSIGNMENT VALUES (9024,8812,144,'01-Apr-21','15-Apr-21',120);
INSERT INTO ASSIGNMENT VALUES (9025,8812,145,'01-Apr-21','30-Apr-21',120);
INSERT INTO ASSIGNMENT VALUES (9026,8812,145,'03-May-21','31-May-21',170);
INSERT INTO ASSIGNMENT VALUES (9027,8812,145,'01-Jun-21','30-Jun-21',170);
INSERT INTO ASSIGNMENT VALUES (9028,8812,145,'01-Jul-21','31-Jul-21',170);
INSERT INTO ASSIGNMENT VALUES (9029,8812,145,'02-Aug-21','31-Aug-21',170);
INSERT INTO ASSIGNMENT VALUES (9030,8812,145,'01-Sep-21','30-Sep-21',170);
INSERT INTO ASSIGNMENT VALUES (9031,8812,145,'01-Oct-21','31-Oct-21',170);
INSERT INTO ASSIGNMENT VALUES (9032,8813,124,'01-Jul-21','20-Jul-21',160);
INSERT INTO ASSIGNMENT VALUES (9033,8813,124,'01-Oct-21','31-Oct-21',160);
INSERT INTO ASSIGNMENT VALUES (9034,8814,148,'02-Aug-21','20-Aug-21',160);
INSERT INTO ASSIGNMENT VALUES (9035,8814,148,'01-Sep-21','15-Sep-21',120);
INSERT INTO ASSIGNMENT VALUES (9036,8814,148,'01-Nov-21','30-Nov-21',150);
INSERT INTO ASSIGNMENT VALUES (9037,8814,148,'01-Dec-21',NULL,NULL);
INSERT INTO ASSIGNMENT VALUES (9038,8815,141,'01-Dec-21',NULL,NULL);
INSERT INTO ASSIGNMENT VALUES (9039,8816,129,'01-Dec-21',NULL,NULL);
INSERT INTO ASSIGNMENT VALUES (9040,8817,120,'01-Dec-21',NULL,NULL);
INSERT INTO ASSIGNMENT VALUES (9041,8819,105,'01-Mar-21','31-Mar-21',170);
INSERT INTO ASSIGNMENT VALUES (9042,8819,102,'01-Mar-21','31-Mar-21',170);
INSERT INTO ASSIGNMENT VALUES (9043,8818,102,'01-Feb-21','28-Feb-21',160);
INSERT INTO ASSIGNMENT VALUES (9044,8820,154,'02-Aug-21','31-Aug-21',170);
```

3. Table data after insert queries

SKILL TABLE CONTENT

```
SQL> SELECT * FROM SKILL;
```

CODE	NAME	CATEGORY
1009	Cash Flows	Accounting
1004	Admin Report	Administrative
1017	Master Advertising	Advertising
1020	Creative Thinking	Consulting
1021	Problem-solving	Consulting
1022	Advanced Consulting	Consulting
1023	Analytical Thinking	Consulting
1010	SAS	Data Analysis
1015	SQL	Data Analysis
1016	R tools	Data Analysis
1001	Financial Management	Finance
1003	Communication	Human Resource
1011	Application Development	IT
1012	Artificial Intelligence	IT
1013	HTML	IT
1014	Java	IT
1019	Contract Details	Legal
1002	Marketing	Marketing
1005	Networking	Marketing
1006	Customer Service	Marketing
1018	PR Communication	Public Relations
1007	Tableau	Sales
1008	Sales Tricks	Sales

23 rows selected.

DEPARTMENT TABLE CONTENT

```
SQL> SELECT * FROM DEPARTMENT;
```

DEPT_CODE	NAME	LOCATION	PHONE	MANAGER_ID
503	Finance	Floor 1, Rm. 1	520-757-6805	118
504	Marketing	Floor 1, Rm. 2	738-975-4415	111
505	Consulting	Floor 1, Rm. 3	463-994-3450	122
506	Data Analysis	Floor 1, Rm. 4	430-903-2038	108
507	IT	Floor 1, Rm. 5	959-979-6535	101
508	Sales	Floor 2, Rm. 1	313-995-4051	126
509	Advertising	Floor 2, Rm. 2	785-312-2397	130
510	Human Resource	Floor 2, Rm. 3	611-871-2471	134
511	Accounting	Floor 2, Rm. 4	379-490-7683	138
512	Administrative	Floor 2, Rm. 5	529-407-8757	103
513	Public Relations	Floor 3, Rm. 1	482-287-3227	142
514	Legal	Floor 3, Rm. 2	702-647-5711	146

12 rows selected.

CLIENT TABLE CONTENT

```
SQL> COLUMN NAME FORMAT A20
SQL> COLUMN STREET FORMAT A20
SQL> COLUMN City FORMAT A20
SQL> COLUMN STATE FORMAT A3
SQL> COLUMN STREET FORMAT A20
SQL> COLUMN INDUSTRY FORMAT A18
SQL> COLUMN WEB_ADDRESS FORMAT A20
SQL> COLUMN PHONE FORMAT A15
SQL> COLUMN CONTACT_LNAME FORMAT A10
SQL> COLUMN CONTACT_FNAME FORMAT A10
SQL>
```



```
SQL> SELECT CLIENT_ID, NAME, STREET,CITY,STATE, ZIP_CODE,INDUSTRY,NVL (TO_CHAR(WEB_ADDRESS), '---') AS
WEB_ADDRESS ,PHONE,CONTACT_LNAME,CONTACT_FNAME
2 FROM CLIENT;
```

CLIENT_ID	NAME	STREET	CITY	STA	ZIP_CODE	INDUSTRY	WEB_ADDRESS	PHONE	CONTACT_LN	CONTACT_FN
901	Price Pantheon	Revolution Passage	Tulsa	SD	74157	Retail	www.pap.com	303-693-3216	Kirk	Esmeralda
902	Albury Wholesale	Liberty Way	Danbury	CT	06810	Retail	www.awh.com	278-558-3007	Rowe	Phoebe
903	Frugal Foods Retail	College Boulevard	Englishtown	NJ	07726	Retail	www.ffr.com	439-404-4405	Dalton	Emilee
904	Dawn Auto	Beach Row	Nampa	ID	83651	Auto	www.da.com	280-412-2771	Richard	Hector
905	Bossel Market Group	Sugarplum Street	Lemont	IL	60439	Education	www.bmg.edu	263-355-1501	Pineda	Jeremy
906	LJ Smith Retail	Angel Lane	Brownsburg	IN	46112	Retail	www.lsr.com	784-881-8630	Berg	Holden
907	Melby Design	Jade Way	Albany	NY	12203	Design	www.md.com	325-357-3280	Oliver	Pedro
908	Cheyenne Hardware	Spring Way	Duluth	GA	30096	Furniture	www.ch.com	681-343-5592	Wu	Antwan
909	Red Hill Services	Great Street	Zanesville	OH	43701	Event Services	www.rhs.com	201-242-8791	Whitney	Bethany
910	Adeptiweb	Penrose Avenue	Sandusky	OH	44870	IT	www.aweb.com	420-953-3968	Moreno	Shaun
911	Sewal Tech	Elm Lane	Shakopee	MN	55379	Government	www.st.gov	876-894-2445	Oconnell	Nehemiah
912	Robey Technology	Marine Lane	Eastpointe	MI	48021	IT	www.rt.com	871-798-0459	Adams	Kali
913	Reneman Motor	Emerald Route	Howard Beach	NY	11414	Auto	www.sm.com	589-951-1711	Maxwell	Selena
914	Electibar	Congress Boulevard	Kearny	NJ	63856	NP Organization	www.eb.org	585-403-7395	Shannon	Finley
915	Honey Beauty Market	Bard Way	Hempstead	NY	11550	Retail	www.hbm.com	516-789-1188	Harmon	Meadow
916	Gpit	Bower Way	Richmond	NY	11418	Fashion	---	506-234-6433	Robinson	Lucy
917	HG Connect	St.Helen	La Porte	IN	46350	Phone	www.hgC.net	554-634-2643	Hanson	Amy
918	Luminus	Robin Street	Erlanger	KY	41018	Light	www.LM.net	654-456-2346	Palle	Bob
919	BBCosmetics	Forbes Ave	Cranford	NJ	07016	Cosmetics	---	673-463-3634	Winters	Charles

19 rows selected.

EMPLOYEE TABLE CONTENT

```
SQL> SELECT emp_num,lname,fname,DOB,hire_date,NVL (TO_CHAR(super_id), '---') AS super_id, dept_code FROM
EMPLOYEE;
```

EMP_NUM	LNAME	FNAME	DOB	HIRE_DATE	SUPER_ID	DEPT_CODE
107	Wise	Ben	31-MAY-64	04-SEP-00	---	512
138	Macias	Kaylyn	19-JUL-71	23-OCT-05	107	511
103	Leverling	Janet	10-JAN-72	05-APR-05	107	512
130	Huynh	Valery	09-JAN-79	03-MAY-06	107	509
122	Blanchard	Rubi	01-SEP-79	28-MAY-06	107	505
108	West	Jeremiah	10-NOV-71	04-FEB-05	107	506
118	Ali	Jan	08-SEP-72	10-SEP-05	107	503
134	Cooke	Pierre	09-JAN-73	09-OCT-05	107	510
101	Fuller	Andrew	31-JAN-74	28-NOV-05	107	507
146	Hudson	Nash	23-JUL-74	10-JAN-06	107	514
111	Pitts	Gruffydd	07-AUG-76	15-MAR-06	107	504
142	Jarvis	Nathalia	02-MAY-77	24-MAR-06	107	513
126	Rivers	Jameson	26-FEB-81	10-JAN-06	107	508
139	Vazquez	Ethan	26-FEB-81	14-OCT-05	138	511

104	Peacock	Margaret	23-APR-84	22-MAR-06	103	512
131	Whitaker	Alexus	28-MAY-84	06-APR-06	130	509
123	Cordova	Sanai	15-JAN-85	07-JUN-06	122	505
109	Iles	Anika	06-SEP-80	27-NOV-05	108	506
119	Ford	Keon	15-JUN-80	06-JUN-06	118	503
135	Curry	Landin	28-FEB-86	09-AUG-06	134	510
102	Davolio	Nancy	22-DEC-85	23-JUN-06	101	507
147	Becker	Regina	02-OCT-83	18-MAR-06	146	514
112	Rayner	Clyde	08-JAN-81	31-DEC-05	111	504
143	Rojas	Parker	26-JAN-83	05-FEB-06	142	513
127	Coleman	Landon	24-DEC-84	28-MAY-06	126	508
140	Harris	Chasity	10-APR-93	05-AUG-17	139	511
141	Shaffer	Kamora	28-OCT-93	01-DEC-18	139	511
106	Suyama	Michael	31-AUG-86	20-AUG-06	104	512
115	Arnold	Hermione	16-NOV-93	04-JAN-18	104	512
133	Costa	Khloe	18-APR-88	17-APR-09	131	509
132	Valdez	Davis	03-MAY-88	18-MAY-11	131	509
125	Melton	Marcelo	09-JUN-86	18-AUG-06	123	505
124	Rivera	Jared	23-MAY-89	07-JUN-13	123	505
110	Schofield	Mikayla	02-MAY-88	28-MAR-10	109	506
117	Travis	Veronica	20-JAN-93	25-DEC-17	109	506
120	Woodard	Micaela	06-JAN-88	27-MAR-09	119	503
121	Fry	Saige	16-NOV-89	10-JUN-14	119	503
136	Sullivan	Julien	05-AUG-87	08-OCT-08	135	510
137	Harding	Summer	13-FEB-93	27-JUN-17	135	510
116	Weaver	Sanai	08-MAY-87	25-MAY-08	102	507
105	Buchanan	Steven	12-FEB-93	30-MAR-17	102	507
148	Graham	Barbara	10-FEB-90	13-AUG-14	147	514
149	Yoder	Lizeth	29-NOV-93	29-AUG-18	147	514
114	Bartlett	Kellan	01-DEC-86	10-APR-06	112	504
113	Harper	Elaine	27-SEP-91	25-OCT-15	112	504
144	Buchanan	Nathalie	29-MAY-88	28-JUL-11	143	513
145	Gates	Jaslene	08-AUG-90	17-OCT-15	143	513
128	Silva	Elliot	31-AUG-89	28-JAN-14	127	508
129	Nolan	Casey	03-OCT-93	16-JAN-18	127	508
150	Park	Coby	25-APR-93	01-APR-21	104	512
151	Johnson	Amy	31-AUG-89	02-APR-21	104	512
152	Clay	Sarah	20-NOV-92	03-APR-21	104	512
153	Smith	Jack	11-OCT-90	04-MAR-21	104	512
154	Johanson	Jamie	05-AUG-89	20-APR-21	123	505

54 rows selected.

TRAINING TABLE CONTENT

```
SQL> COLUMN name FORMAT A20
SQL> COLUMN date_acquired FORMAT A15
SQL> COLUMN comments FORMAT A20
SQL> SELECT * from training;
```

TRAIN_NUM	CODE	EMP_NUM	NAME	DATE_ACQUIRED	COMMENTS
7389	1004	106	Coursework	11-JAN-19	Completed with A
7415	1004	115	Technical Training	21-JAN-19	Completed with A-
7414	1017	132	Workshop	04-FEB-19	Completed with A
7395	1022	124	Coursework	15-FEB-19	Completed with B+
7422	1022	125	Coursework	18-FEB-19	Completed with B
7396	1023	125	Coursework	19-FEB-19	Completed with A
7402	1011	105	Coursework	21-FEB-19	Completed with A-
7408	1005	113	Workshop	22-FEB-19	Completed with A-
7410	1018	144	Technical Training	25-FEB-19	Completed with B+
7423	1011	116	Coursework	04-MAR-19	Completed with B+
7421	1018	145	Technical Training	05-MAR-19	Completed with B
7394	1021	125	Technical Training	06-MAR-19	Completed with A
7403	1012	105	Coursework	08-MAR-19	Completed with B
7413	1012	102	Coursework	14-MAR-19	Completed with A
7387	1009	140	Coursework	15-MAR-19	Completed with A-
7416	1009	141	Coursework	22-MAR-19	Completed with B+
7417	1021	124	Technical Training	22-MAR-19	Completed with A-
7401	1003	136	Coursework	25-MAR-19	Completed with B
7399	1016	110	Technical Training	03-APR-19	Completed with B+
7420	1003	137	Coursework	04-APR-19	Completed with A
7424	1016	117	Technical Training	04-APR-19	Completed with B
7406	1019	148	Workshop	08-APR-19	Completed with A-
7412	1008	128	Technical Training	10-APR-19	Completed with A
7393	1020	124	Workshop	10-APR-19	Completed with B+
7419	1008	129	Technical Training	15-APR-19	Completed with A-
7409	1006	114	Workshop	16-APR-19	Completed with B
7397	1010	110	Technical Training	26-APR-19	Completed with B+
7418	1006	113	Workshop	29-APR-19	Completed with A
7400	1001	120	Workshop	01-MAY-19	Completed with A-

7427	1010	117 Technical Training	15-MAY-19	Completed with	B
7404	1013	105 Workshop	16-MAY-19	Completed with	B+
7398	1015	117 Technical Training	16-MAY-19	Completed with	A
7411	1007	129 Technical Training	22-MAY-19	Completed with	A-
7426	1013	116 Workshop	27-MAY-19	Completed with	B
7405	1014	105 Technical Training	30-MAY-19	Completed with	A
7425	1014	116 Technical Training	31-MAY-19	Completed with	A-
7407	1002	137 Workshop	04-JUN-19	Completed with	B+
7391	1017	133 Workshop	25-JUN-19	Completed with	B
7428	1004	150 Coursework	01-JUL-21	Completed with	A-
7429	1001	102 Workshop	08-MAR-21	Completed with	A
7438	1002	125 Workshop	02-JAN-20	Completed with	B+
7443	1003	116 Coursework	13-AUG-21	Completed with	A-
7430	1004	117 Technical Training	09-APR-20	Completed with	B
7436	1004	115 Technical Training	14-SEP-20	Completed with	B+
7447	1006	120 Workshop	09-JUL-20	Completed with	A
7442	1007	133 Technical Training	16-FEB-21	Completed with	A-
7432	1009	113 Coursework	22-APR-20	Completed with	B
7450	1009	117 Coursework	20-SEP-19	Completed with	B+
7441	1010	136 Technical Training	14-SEP-21	Completed with	A
7446	1010	124 Technical Training	25-JAN-21	Completed with	A-
7434	1011	114 Coursework	06-APR-20	Completed with	B
7445	1012	117 Coursework	24-JUN-21	Completed with	A
7452	1012	148 Coursework	09-DEC-20	Completed with	A-
7439	1013	125 Workshop	25-JUN-20	Completed with	B+
7433	1014	106 Technical Training	03-NOV-20	Completed with	B
7448	1014	140 Technical Training	08-JUL-21	Completed with	A-
7437	1016	105 Technical Training	30-OCT-19	Completed with	A
7440	1016	137 Technical Training	26-JUL-19	Completed with	B+
7449	1017	144 Workshop	23-APR-21	Completed with	A-
7451	1018	125 Technical Training	23-NOV-20	Completed with	B
7435	1021	116 Technical Training	14-DEC-20	Completed with	B+
7444	1004	151 Coursework	04-AUG-21	Completed with	A
7453	1004	152 Coursework	24-AUG-21	Completed with	A-
7431	1004	153 Coursework	16-JUL-21	Completed with	B
7454	1020	154 Workshop	20-MAY-21	Completed with	A

65 rows selected.

PROJECT TABLE CONTENT

SQL> COLUMN NAME FORMAT A30

SQL> SELECT PROJ_NUMBER,NAME,START_DATE,NVL(TO_CHAR(TO_CHAR(TOTAL_COST),'\$999999999'),'---') AS
TOTAL_COST,DEPT_CODE,CLIENT_ID,CODE FROM PROJECT;

PROJ_NUMBER	NAME	START_DATE	TOTAL_COST	DEPT_CODE	CLIENT_ID	CODE
8801	PP Consulting Project	01-AUG-19	\$50601	505	901	1022
8802	AA Web Develop	30-AUG-19	\$40684	507	902	1013
8803	FFR Advertise	01-NOV-19	\$51354	509	903	1017
8804	DA Consulting Project	01-MAY-20	\$34412	505	904	1020
8805	BMG Consulting Project	01-JUN-20	\$45154	505	905	1020
8806	LSR Financial Analysis	03-AUG-20	\$35518	503	906	1001
8807	MD Sales Campaign	01-SEP-20	\$89975	508	907	1007
8808	CH Consulting Project	01-SEP-20	\$64513	505	908	1021
8809	RH Consulting Project	01-OCT-20	\$81564	505	909	1022
8810	Aweb Web Development	02-NOV-20	\$84234	507	910	1014
8811	ST Database Project	01-MAR-21	\$41156	506	911	1015
8812	RT PR Campaign	01-APR-21	\$54803	513	912	1018
8813	RM Consulting Project	01-JUL-21	\$64238	505	913	1020
8814	EL Contract Review	02-AUG-21	---	514	914	1019
8815	HBM Annual Report	01-DEC-21	---	511	915	1009
8816	PPSales Campaign	01-DEC-21	---	508	907	1007
8817	AA Financial Analysis	01-DEC-21	---	503	906	1001
8818	ST AI Project	01-FEB-21	\$49536	507	911	1012
8819	BMG AI Usage	01-MAR-21	\$84234	507	905	1012
8820	LSR Consulting	02-AUG-21	\$56543	505	906	1020
8821	LSR Sales	01-DEC-21	---	508	906	1007

21 rows selected.

ASSIGNMENT TABLE CONTENT

```
SQL> COLUMN date_assigned FORMAT A20
SQL> COLUMN date_ended FORMAT A20
SQL> COLUMN hours_used FORMAT A12
SQL> SELECT ASSIGN_NUM, PROJ_NUMBER, EMP_NUM, DATE_ASSIGNED,
      2  NVL(TO_CHAR(DATE_ENDED), '---') AS DATE_ENDED, NVL(TO_CHAR(HOURS_USED), '---') AS HOURS_USED FROM
ASSIGNMENT;
```

ASSIGN_NUM	PROJ_NUMBER	EMP_NUM	DATE_ASSIGNED	DATE_ENDED	HOURS_USED
9000	8801	124	01-AUG-19	30-AUG-19	180
9001	8801	124	03-SEP-19	30-SEP-19	160
9002	8802	116	03-SEP-19	30-SEP-19	180
9003	8803	133	04-NOV-19	18-NOV-19	128
9004	8803	132	04-NOV-19	18-NOV-19	128
9005	8804	124	04-MAY-20	25-MAY-20	160
9006	8805	124	01-JUN-20	18-JUN-20	144
9007	8806	120	03-AUG-20	28-AUG-20	180
9008	8807	129	01-SEP-20	20-SEP-20	160
9009	8808	125	01-SEP-20	21-SEP-20	152
9010	8808	124	04-SEP-20	18-SEP-20	120
9011	8808	125	01-OCT-20	15-OCT-20	120
9012	8809	125	03-OCT-20	30-OCT-20	170
9013	8809	125	02-NOV-20	30-NOV-20	170
9014	8809	125	01-DEC-20	31-DEC-20	170
9015	8809	124	01-OCT-20	31-OCT-20	170
9016	8809	124	02-NOV-20	30-NOV-20	170
9017	8809	124	01-DEC-20	31-DEC-20	170
9018	8809	124	04-JAN-21	31-JAN-21	170
9019	8809	124	01-FEB-21	28-FEB-21	170
9020	8809	124	01-MAR-21	31-MAR-21	170
9021	8810	105	02-NOV-20	20-NOV-20	160

9022	8810	116	02-NOV-20	20-NOV-20	160
9023	8811	117	01-MAR-21	30-MAR-21	155
9024	8812	144	01-APR-21	15-APR-21	120
9025	8812	145	01-APR-21	30-APR-21	120
9026	8812	145	03-MAY-21	31-MAY-21	170
9027	8812	145	01-JUN-21	30-JUN-21	170
9028	8812	145	01-JUL-21	31-JUL-21	170
9029	8812	145	02-AUG-21	31-AUG-21	170
9030	8812	145	01-SEP-21	30-SEP-21	170
9031	8812	145	01-OCT-21	31-OCT-21	170
9032	8813	124	01-JUL-21	20-JUL-21	160
9033	8813	124	01-OCT-21	31-OCT-21	160
9034	8814	148	02-AUG-21	20-AUG-21	160
9035	8814	148	01-SEP-21	15-SEP-21	120
9036	8814	148	01-NOV-21	30-NOV-21	150
9037	8814	148	01-DEC-21	---	---
9038	8815	141	01-DEC-21	---	---
9039	8816	129	01-DEC-21	---	---
9040	8817	120	01-DEC-21	---	---
9041	8819	105	01-MAR-21	31-MAR-21	170
9042	8819	102	01-MAR-21	31-MAR-21	170
9043	8818	102	01-FEB-21	28-FEB-21	160
9044	8820	154	02-AUG-21	31-AUG-21	170

45 rows selected.