

PART II A.SCRIPT#1

SKILL

```
SQL> CREATE TABLE Skill
  2 (Code          NUMBER(4)          CONSTRAINT Skill_Code_PK PRIMARY KEY,
  3  Name          VARCHAR2(15)      CONSTRAINT SKILL_NAME_NN NOT NULL,
  4  Category      VARCHAR2(15),
  5  CONSTRAINT Skill_Code_CK CHECK(Code >= 0),
  6  CONSTRAINT Skill_Category_CK CHECK
  7      (Category IN ('Communication','Programming', 'Management')),
  8  CONSTRAINT Skill_Name_CK CHECK (Name IN ('Speaking','Java','C++', 'Python',
  9      'Leadership','Writing','Decision Making')));
```

Table created.

DEPARTMENT

```
SQL> CREATE TABLE Department
  2 (Dept_Code     NUMBER(2) CONSTRAINT Department_Dept_Code_PK PRIMARY KEY,
  3  Name          VARCHAR2(15) CONSTRAINT Department_Name_NN NOT NULL,
  4  Location      VARCHAR2(15)CONSTRAINT Department_Location_NN NOT NULL,
  5  Phone         VARCHAR2(12),
  6  Manager_ID    NUMBER(4),
  7  CONSTRAINT Department_Manager_ID_CK CHECK (Manager_ID > 0),
  8  CONSTRAINT Department_Location_CK CHECK (Location IN ('A100', 'B101', 'B103', 'C303', 'A102','D101')));
```

Table created.

EMPLOYEE

```
SQL> CREATE TABLE Employee
  2 (Emp_Num       NUMBER(4)          CONSTRAINT Employee_Emp_Num_PK PRIMARY KEY,
  3  LNAME         VARCHAR2(10),
  4  FNAME         VARCHAR2(10),
  5  DOB           DATE,
  6  Hire_Date     DATE              DEFAULT SYSDATE,
  7  Super_ID      NUMBER(4),
  8  Dept_Code     NUMBER(4),
  9  CONSTRAINT Employee_Dept_Code_FK FOREIGN KEY(Dept_Code) REFERENCES Department(Dept_Code),
 10  CONSTRAINT Employee_Super_ID_FK  FOREIGN KEY(Super_ID)  REFERENCES Employee (Emp_Num));
```

Table created.

TRAINING

```
SQL> CREATE TABLE Training
  2 (Train_Num      NUMBER(4)          CONSTRAINT Training_Train_Num_PK PRIMARY KEY,
  3  Code           NUMBER(4),
  4  Emp_Num        NUMBER(4),
  5  Name           VARCHAR2(30)       CONSTRAINT Training_Name_NN NOT NULL,
  6  Date_Acquired  DATE,
  7  Comments       VARCHAR2(70),
  8  CONSTRAINT Training_Code_FK      FOREIGN KEY (Code)      REFERENCES Skill (Code),
  9  CONSTRAINT Training_Emp_Num_FK   FOREIGN KEY (Emp_Num)    REFERENCES Employee (Emp_NUM));
```

Table created.

CLIENT

```
SQL> CREATE TABLE Client
  2 (Client_ID      NUMBER(4)          CONSTRAINT CLIENT_CLIENT_ID_PK PRIMARY KEY,
  3  Name           VARCHAR2(12)       CONSTRAINT CLIENT_NAME_NN NOT NULL,
  4  Street         VARCHAR2(20),
  5  City           VARCHAR2(12),
  6  State          VARCHAR2(2)        CONSTRAINT CLIENT_STATE_NN NOT NULL
  7              CONSTRAINT CLIENT_STATE_CK
  8              CHECK (STATE IN ('AL', 'AK', 'AZ', 'AR', 'CA', 'CO', 'CT',
  9                              'DE', 'FL', 'GA', 'HI', 'ID', 'IL', 'IN', 'IA', 'KS', 'KY', 'LA', 'ME', 'MD',
10                              'MA', 'MI', 'MN', 'MS', 'MO', 'MT', 'NE', 'NV', 'NH', 'NJ', 'NM',
11                              'NY', 'NC', 'ND', 'OH', 'OK', 'OR', 'PA', 'RI', 'SC', 'SD', 'TN',
12                              'TN', 'TX', 'UT', 'VT', 'VA', 'WA', 'WV', 'WI', 'WY')),
13  Zip_Code        VARCHAR2(5),
14  Industry        VARCHAR2(11)       CONSTRAINT CLIENT_INDUSTRY_CK
15              CHECK (INDUSTRY IN ('Internet', 'E-Commerce', 'Banking', 'Investment')) ,
16  Web_Address     VARCHAR2(20),
17  Phone           VARCHAR2(12),
18  Contact_LName   VARCHAR2(10),
19  Contact_Fname   VARCHAR2(10));
```

Table created.

PROJECT

```
SQL> CREATE TABLE Project
  2  (Proj_Number    NUMBER(4)          CONSTRAINT Project_PROJ_NUMBER_PK PRIMARY KEY,
  3  NAME            VARCHAR2(30),
  4  Start_Date      DATE                DEFAULT SYSDATE,
  5  Total_Cost      NUMBER(6,2)         CONSTRAINT PROJECT_TOTAL_COST_CK
  6  CHECK (TOTAL_COST > 0),
  7  Dept_Code       NUMBER(4)          CONSTRAINT PROJECT_DEPT_CODE_FK
  8  REFERENCES DEPARTMENT (DEPT_CODE),
  9  Client_ID       NUMBER(4)          CONSTRAINT PROJECT_CLIENT_ID_FK
 10  REFERENCES CLIENT (CLIENT_ID),
 11  Code            NUMBER(4)          CONSTRAINT PROJECT_CODE_FK
 12  REFERENCES SKILL (CODE));
```

Table created.

ASSIGNMENT

```
SQL> CREATE TABLE Assignment
  2  (Assign_Num     NUMBER(4)          CONSTRAINT Assignment_Assign_Num_PK PRIMARY KEY,
  3  Proj_Number     NUMBER(4)          CONSTRAINT Assignment_Proj_Number_FK
  4  REFERENCES PROJECT (PROJ_NUMBER),
  5  Emp_Num         NUMBER(4)          CONSTRAINT Assignment_Emp_Numb_FK
  6  REFERENCES EMPLOYEE (Emp_Num),
  7  Date_Assigned   DATE                DEFAULT SYSDATE,
  8  Date_Ended      DATE,
  9  Hours_Used      NUMBER(4)          CONSTRAINT Assignment_Hours_Used_CK CHECK (Hours_Used >= 0),
 10  CONSTRAINT Assignment_Date_Ended_CK CHECK (Date_Ended >= Date_Assigned));
```

Table created.