***ASSIGNMENT:08***

**DATE:** 30/01/2019

**Using the following tables write SQL queries:**

**TABLE1:** **DEPT (DEPT\_NAME, DEPT\_ID)**

**TABLE2: EMPLOYEE (ENO, NAME, DESIGNATION)**

**TABLE3: SUPERVISOR (SUP\_ID, ENO, NO\_OF\_PROJECTS)**

**TABLE4: PROJECT (P\_NAME, PID, SUP\_ID, DEPT\_ID, YEAR)**

**ENTITY:** DEPT

**ATTRIBUTE:** DEPT\_NAME, DEPT\_ID

**PRIMARY KEY:** DEPT\_ID

**ENTITY:** EMPLOYEE

**ATTRIBUTE:** ENO, NAME, DESIGNATION

**PRIMARY KEY:** ENO

**ENTITY:** SUPERVISOR

**ATTRIBUTE:** SUP\_ID, ENO, NO\_OF\_PROJECTS

**PRIMARY KEY:** SUP\_ID

**FOREIGN KEY:** ENO references **EMPLOYEE**

**ENTITY:** PROJECT

**ATTRIBUTE:** P\_NAME, P\_ID, SUP\_ID, DEPT\_ID, YEAR

**PRIMARY KEY:** P\_ID

**FOREIGN KEY:** SUP\_ID references **SUPERVISOR**

DEPT\_ID references **DEPARTMENT**

|  |
| --- |
| **SUPERVISOR** |
| SUP\_ID |
| ENO |
| NO\_OF\_PROJECTS |

|  |
| --- |
| **DEPT** |
| DEPT\_NAME |
| DEPT\_ID |

|  |
| --- |
| **EMPLOYEE** |
| ENO |
| NAME |
| DESIGNATION |

|  |
| --- |
| **PROJECT** |
| P\_NAME |
| P\_ID |
| SUP\_ID |
| DEPT\_ID |
| YEAR |

**TABLE1:** **DEPT**

**CREATE TABLE**

CREATE TABLE DEPT

(

DEPT\_NAME VARCHAR(10),

DEPT\_ID NUMBER(3) PRIMARY KEY

);

DESC DEPT;

Name Null? Type

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

DEPT\_NAME VARCHAR2(10)

DEPT\_ID NOT NULL NUMBER(3)

**DATA INSERTION INTO TABLE**

INSERT INTO DEPT VALUES('SOFTWARE',001);

INSERT INTO DEPT VALUES('HARDWARE',002);

**RECORD STORED IN TABLE**

SELECT \* FROM DEPT;

DEPT\_NAME DEPT\_ID

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

SOFTWARE 1

HARDWARE 2

**TABLE2:** **EMPLOYEE**

**CREATE TABLE**

CREATE TABLE EMPLOYEE(

ENO NUMBER(3) PRIMARY KEY,

NAME VARCHAR2(10),

DESIGNATION VARCHAR2(10)

);

DESC EMPLOYEE;

Name Null? Type

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

ENO NOT NULL NUMBER(3)

NAME VARCHAR2(10)

DESIGNATION VARCHAR2(10)

**DATA INSERTION INTO TABLE**

INSERT INTO EMPLOYEE VALUES(111,'DEEP','CEO');

INSERT INTO EMPLOYEE VALUES(222,'RAHUL','DEVELOPER');

INSERT INTO EMPLOYEE VALUES(333,'SHAWN','DEVELOPER');

**RECORD STORED IN TABLE**

SELECT \* FROM EMPLOYEE;

ENO NAME DESIGNATIO

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

111 DEEP CEO

222 RAHUL DEVELOPER

333 SHAWN DEVELOPER

**TABLE3:** **SUPERVISOR**

**CREATE TABLE**

CREATE TABLE SUPERVISOR(

SUP\_ID NUMBER(3) PRIMARY KEY,

ENO NUMBER(3),

NO\_OF\_PROJECT NUMBER(3),

FOREIGN KEY(ENO) REFERENCES EMPLOYEE(ENO) ON DELETE CASCADE

);

DESC SUPERVISOR;

Name Null? Type

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

SUP\_ID NOT NULL NUMBER(3)

ENO NUMBER(3)

NO\_OF\_PROJECT NUMBER(3)

**DATA INSERTION INTO TABLE**

INSERT INTO SUPERVISOR VALUES(111,'111',20);

INSERT INTO SUPERVISOR VALUES(222,222,30);

INSERT INTO SUPERVISOR VALUES(333,333,15);

**RECORD STORED IN TABLE**

SELECT \* FROM SUPERVISOR;

SUP\_ID ENO NO\_OF\_PROJECT

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

111 111 20

222 222 30

333 333 15

**TABLE4:** **PROJECT**

**CREATE TABLE**

CREATE TABLE PROJECT(

P\_NAME VARCHAR2(10),

PID NUMBER(3) PRIMARY KEY,

SUP\_ID NUMBER(3),

DEPT\_ID NUMBER(3),

YEAR NUMBER(4),

FOREIGN KEY(SUP\_ID) REFERENCES SUPERVISOR(SUP\_ID),

FOREIGN KEY(DEPT\_ID) REFERENCES DEPT(DEPT\_ID)

);

DESC PROJECT;

Name Null? Type

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

P\_NAME VARCHAR2(10)

PID NOT NULL NUMBER(3)

SUP\_ID NUMBER(3)

DEPT\_ID NUMBER(3)

YEAR NUMBER(4)

**DATA INSERTION INTO TABLE**

INSERT INTO PROJECT VALUES('BOOK SHOP',101,111,001,2018);

INSERT INTO PROJECT VALUES('EVM',102,222,002,2018);

INSERT INTO PROJECT VALUES('GST',103,333,001,2018);

**RECORD STORED IN TABLE**

SELECT \* FROM PROJECT;

P\_NAME PID SUP\_ID DEPT\_ID YEAR

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BOOK SHOP 101 111 1 2018

EVM 102 222 2 2018

GST 103 333 1 2018

**QUERY 1: WRITE A SQL QUERY TO GENERATE LIST OF PROJECTS IN A SESSION.**

SELECT \* FROM PROJECT WHERE YEAR>2017 AND YEAR<2019;

**OUTPUT:**

P\_NAME PID SUP\_ID DEPT\_ID YEAR

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BOOK SHOP 101 111 1 2018

EVM 102 222 2 2018

GST 103 333 1 2018

**QUERY 2: WRITE A SQL QUERY TO FIND THE DETAILS OF SUPERVISOR WHO WAS OFFER PROJECT IN A PARTICULAR YEAR.**

SELECT NO\_OF\_PROJECT,NAME FROM SUPERVISOR,PROJECT,EMPLOYEE

WHERE SUPERVISOR.SUP\_ID=PROJECT.SUP\_ID

AND SUPERVISOR.ENO=EMPLOYEE.ENO

AND YEAR=2018;

**OUTPUT:**

NO\_OF\_PROJECT NAME

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20 DEEP

30 RAHUL

15 SHAWN