***ASSIGNMENT:02***

**DATE:** 03/01/2019

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

**TABLE1:** **DEPT (DNO, DNAME)**

**TABLE2: EMP (ENO, ENAME, CITY, SALARY, DNO, JOIN\_DATE)**

**TABLE3: PROJECT (PNO, ENO)**

**ENTITY:** DEPT

**ATTRIBUTE:** DNO, DNAME

**PRIMARY KEY:** DNO

**ENTITY:** EMP

**ATTRIBUTE:** ENO, ENAME, CITY, SALARY, DNO, JOIN\_DATE

**PRIMARY KEY:** ENO

**FOREIGN KEY:** DNO references **DEPT**

**ENTITY:** PROJECT

**ATTRIBUTE:** PNO, ENO

**PRIMARY KEY:** PNO

**FOREIGN KEY:** ENO references **EMP**

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| --- |
| **PROJECT** |
| PNO |
| ENO |

|  |
| --- |
| **EMP** |
| ENO |
| ENAME |
| CITY |
| SALARY |
| DNO |
| JOIN\_DATE |

|  |
| --- |
| **DEPT** |
| DNO |
| DNAME |

**TABLE1:** **DEPT**

**CREATE TABLE**

CREATE TABLE DEPT(

DNO NUMBER(2) PRIMARY KEY,

DNAME VARCHAR2(10)

);

DESC DEPT;

Name Null? Type

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DNO NOT NULL NUMBER(2)

DNAME VARCHAR2(10)

**DATA INSERTION INTO TABLE**

INSERT INTO DEPT VALUES(2,'CMSCH');

INSERT INTO DEPT VALUES(4,'MATH');

INSERT INTO DEPT VALUES(5,'PHYSICS');

**RECORD STORED IN TABLE**

SELECT \* FROM DEPT;

DNO DNAME

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2 CMSCH

4 MATH

5 PHYSICS

**TABLE2:**  **EMP**

**CREATE TABLE**

CREATE TABLE EMP(

ENO NUMBER(3) PRIMARY KEY,

ENAME VARCHAR2(10),

CITY VARCHAR2(10),

SALARY NUMBER(4),

DNO NUMBER(2),

JOIN\_DATE DATE,

FOREIGN KEY(DNO) REFERENCES DEPT(DNO) ON DELETE CASCADE

);

DESC EMP;

Name Null? Type

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

ENO NOT NULL NUMBER(3)

ENAME VARCHAR2(10)

CITY VARCHAR2(10)

SALARY NUMBER(4)

DNO NUMBER(2)

JOIN\_DATE DATE

**DATA INSERTION INTO TABLE**

INSERT INTO EMP VALUES(11,'DEEP','HALISAHAR',2000,5,'20-SEP-98');

INSERT INTO EMP VALUES(22,'SHAWN','KOLKATA',1800,5,'29-SEP-98');

INSERT INTO EMP VALUES(33,'RAHUL','KOLKATA',2800,2,'29-OCT-98');

**RECORD STORED IN TABLE**

SELECT \* FROM EMP;

ENO ENAME CITY SALARY DNO JOIN\_DATE

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11 DEEP HALISAHAR 2000 5 20-SEP-98

22 SHAWN KOLKATA 1800 5 29-SEP-98

33 RAHUL KOLKATA 2800 2 29-OCT-98

**TABLE3:** **PROJECT**

**CREATE TABLE**

CREATE TABLE PROJECT(

PNO NUMBER(2) PRIMARY KEY,

ENO NUMBER(3),

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

);

DESC PROJECT;

Name Null? Type

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

PNO NOT NULL NUMBER(2)

ENO NUMBER(3)

**DATA INSERTION INTO TABLE**

INSERT INTO PROJECT VALUES(1,11);

INSERT INTO PROJECT VALUES(2,22);

INSERT INTO PROJECT VALUES(3,33);

**RECORD STORED IN TABLE**

SELECT \* FROM PROJECT;

PNO ENO

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1 11

2 22

3 33

**QUERY 1: DISPLAY THE AVARAGE SALARY OF DEPARTMENT NO. 5.**

SELECT AVG(SALARY) AS SALARY FROM EMP WHERE DNO=5;

**OUTPUT:**

SALARY

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1900

**QUERY 2: FIND THE DIFFERENCE BEETWEEN HIGHEST AND LOWEST SALARY.**

SELECT MAX(SALARY)-MIN(SALARY) FROM EMP;

**OUTPUT:**

MAX(SALARY)-MIN(SALARY)

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1000

**QUERY 3: DISPLAY LIST OF ALL EMPLOYEE IN DEPARTMENT NO. 2.**

SELECT \* FROM EMP WHERE DNO=2;

**OUTPUT:**

ENO ENAME CITY SALARY DNO JOIN\_DATE

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33 RAHUL KOLKATA 2800 2 29-OCT-98