SQL ASSIGNMENT-3

B.C.A – A3, A4, A7, A8,D1,D2

Kindly note given Instructions

1. Assignment must be submitted on given time.

**Create below Tables with appropriate given descriptions**

Create Table: **STUDENT**

| **Column Name** | **Data Type** | **Size** | **Constraints** |
| --- | --- | --- | --- |
| studentid | Number | 3 |  |
| sname | Varchar2 | 15 | Not null |
| birthdate | Date |  |  |
| facultyid | Varchar2 | 5 | Foreign Key,  Must start with ‘F’ |
| city | Varchar2 | 20 |  |

Create Table: **FACULTY**

| **Column Name** | Data Type | Size | Constraints |
| --- | --- | --- | --- |
| facultyid | Varchar2 | 5 | Primary Key, Must start with ‘F’ |
| fname | Varchar2 | 15 | Not null, Must be in Uppercase |
| classroom\_no | Number | 8 |  |
| designation | Varchar2 | 20 |  |
| deptno | Number | 3 | Foreign Key |
| sal | Number | 10 |  |

Create Table: **DEPARTMENT**

| **Column Name** | Data Type | Size | Constraints |
| --- | --- | --- | --- |
| deptno | Number | 3 | Primary Key |
| dname | Varchar2 | 20 |  |
| location | Varchar2 | 20 |  |

**Insert the values:**

**Table: STUDENT**

| **studentid** | **sname** | **birthdate** | **facultyid** | **city** |
| --- | --- | --- | --- | --- |
| 1 | Peter | 03-apr-1996 | F10 | Newyork |
| 2 | John | 22-jun-1996 | F11 | Boston |
| 3 | Kevin | 25-mar-1995 | F10 | Newyork |
| 4 | Ivan | 04-may-1995 | F14 | Newyork |
| 5 | King | 17-feb-1996 | F11 | Boston |
| 6 | Miller | 10-apr-1994 | F12 | Germany |
| 7 | Clark | 15-aug-1994 | F12 | Boston |
| 8 | Adams | 28-feb-1994 | F10 | Germany |
| 9 | Blake | 06-jan-1995 | F14 | Germany |
| 10 | Turner | 03-jun-1995 | F10 | Boston |

**Insert the values:**

**Table: FACULTY**

| **facultyid** | **fname** | **classroom\_no** | **designation** | **deptno** | **sal** |
| --- | --- | --- | --- | --- | --- |
| F10 | SMITH | 101 | Lecturer | 30 | 38000 |
| F11 | ALLEN | 102 | Programmer | 20 | 35000 |
| F12 | WARD | 103 | Accountant | 20 | 32000 |
| F13 | MARTIN | 104 | Programmer | 30 | 30000 |
| F14 | SCOTT | 105 | Lecturer | 40 | 36000 |

**Insert the values:**

**Table: DEPARTMENT**

| **deptno** | **dname** | **location** |
| --- | --- | --- |
| 20 | COMPUTER | Atmiya |
| 30 | ACCOUNTING | Virani |
| 40 | OPERATIONS | Atmiya |
| 50 | ELECTRIC | Atmiya |

**Exercise #1: Solve Queries using Operators.**

1. Increment the salary of 500 whose id is ‘F11’;
2. Display students whose name starts with ‘K’;
3. Find all faculties whose salaries are greater than 32000.
4. Find those faculty records whose classroom numbers are 102,103 and 105.
5. Find departments excluding ‘Operations’.
6. Find the names of an employee whose salary is Null (NIL).
7. Display department names of between deptno 30 to 50. (Use Between operator)

**Exercise #2: Solve Queries using Distinct operator, Group by clause, Alter and Update commands.**

1. Display the Distinct Designation from the FACULTY table.
2. Count the Distinct Designation from table FACULTY.
3. Find the average salary of all departments.
4. Find the average salaries of each department.
5. Find the average salaries of each job.
6. Find the average and sum of the salaries of each job excluding Accountant and Programmer.
7. How to add column in existing table? Add one column named city in Faculty table.
8. Update Department location ‘Virani’ to ‘Atmiya’.