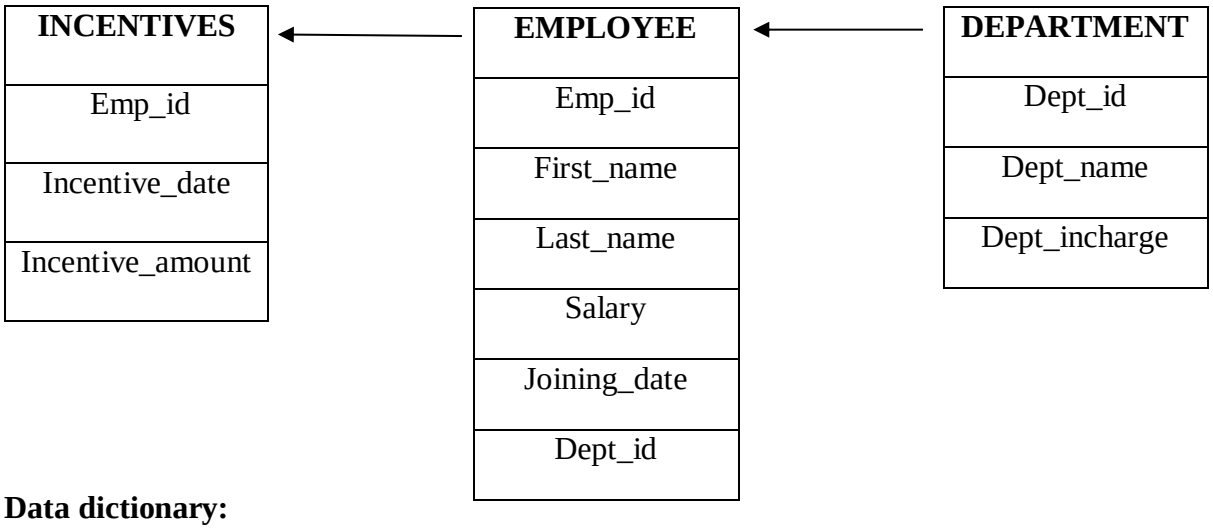
Ex No:4 **SQL-SIMPLE QUERIES**

Date : 20.02.2023

Aim:

To create the database for given schema diagram using oracle environment and answer the given set of simple queries.

Schema diagram:



Data dictionary:

Employee relation :

Attribute	Data type	constraint	Remarks
Emp_id	Varchar(50)	Primary key	
First_name	Varchar(50)		
Last_name	Varchar(50)		
Salary	number		
Joining_date	date		
Dept_id	Varcha(50)	Foreign key	

Department relation:

Attribute	Data type	Constraints	Remarks

Dept_id	Varchar(50)	Primary key	
Dept_name	Varchar(50)		
Dept_incharge	Varchar(50)		

Incentives relation:

Attribute	Data type	Constraints	Remarks
Emp_id	Varchar(50)	Foreign key	
Incentive_date	date		
Incentive_amount	Number		

Procedure:

CREATION OF TABLES :

```
CREATE TABLE EMPLOYEE(EMP_ID INT PRIMARY KEY,FIRST_NAME VARCHAR(50),LAST_NAME VARCHAR(50),SALARY NUMBER,
JOIN_DATE DATE,DEPT_ID NUMBER,FOREIGN KEY(DEPT_ID) REFERENCES DEPARTMENT(DEPT_ID));
```

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
EMPLOYEE	EMP_ID	NUMBER	22	-	0	1	-	-	-
	FIRST_NAME	VARCHAR2	30	-	-	-	✓	-	-
	LAST_NAME	VARCHAR2	30	-	-	-	✓	-	-
	SALARY	NUMBER	22	-	0	-	✓	-	-
	DEPT_ID	NUMBER	22	-	0	-	-	-	-
	JOIN_DATE	DATE	7	-	-	-	✓	-	-

```
CREATE TABLE INCENTIVES(EMP_ID INT NOT NULL,INCENTIVE_DATE DATE,INCENTIVE_AMT INT,
FOREIGN KEY(EMP_ID) REFERENCES EMPLOYEE(EMP_ID));
```

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
INCENTIVES	EMP_ID	NUMBER	22	-	0	-	-	-	-
	INCENTIVE_DATE	DATE	7	-	-	-	✓	-	-
	INCENTIVE_AMT	NUMBER	22	-	0	-	✓	-	-

```
CREATE TABLE DEPARTMENT(DEPT_ID NUMBER PRIMARY KEY,DEPT_NAME VARCHAR(50),DEPT_INCHARGE VARCHAR(50));
```

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
DEPARTMENT	DEPT_ID	NUMBER	22	-	0	1	-	-	-
	DEPT_NAME	VARCHAR2	50	-	-	-	✓	-	-
	DEP_INCHARGE	VARCHAR2	50	-	-	-	✓	-	-

INSERTION OF TABLE

```
INSERT INTO EMPLOYEE VALUES(105,'KRISH','SUNDAR',90000,10,'JANUARY 23,2021');
INSERT INTO EMPLOYEE VALUES(101,'RAM','KUMAR',40000,12,'APRIL 27,2021');
INSERT INTO EMPLOYEE VALUES(100,'MOHAN','KUMAR',30000,12,'MAY 17,2022');
```

FIRST_NAME	JOINYEAR	JOINMONTH	JOINDATE
KRISH	2020	1	23
RAM	2021	4	27
MOHAN	2022	5	17

```
INSERT INTO DEPARTMENT VALUES(10,'HUMAN RESOURCES','WALTER LEWIN')
INSERT INTO DEPARTMENT VALUES(12,'DEPLOYEMENT','SUMITA ARORA')
INSERT INTO DEPARTMENT VALUES(11,'DEVELOPMENT','OP TANDON')
INSERT INTO DEPARTMENT VALUES(15,'ACCOUNTING','RAM')
```

DEPT_ID	DEPT_NAME	DEP_INCHARGE
10	HUMAN RESOURCES	WALTER LEWIN
12	DEPLOYEMENT	SUMITA ARORA
11	DEVELOPMENT	O P TANDON
15	ACCOUNTING	RAM

```
INSERT INTO INCENTIVES VALUES(100,'SEPTEMBER 23,2021',5000)
INSERT INTO INCENTIVES VALUES(105,'SEPTEMBER 12,2020',10000)
```

EMP_ID	INCENTIVE_DATE	INCENTIVE_AMT
100	09/23/2021	5000
105	09/12/2020	10000

2 rows returned in 0.01 seconds Download

QUERIES:

1. **List the FIRST_NAME, Joining year, Joining Month and Joining Date of the employee.**

```
select first_name,extract(year from join_date) as joinyear,extract(month from join_date) as joinmonth,
extract(day from join_date) as joindate from employee;
```

OUTPUT:

FIRST_NAME	JOINYEAR	JOINMONTH	JOINDATE
KRISH	2020	1	23
RAM	2021	4	27
MOHAN	2022	5	17

2. **Get all the employee details order by First_Name Ascending and Salary descending.**

```
select * from employee order by first_name,salary desc;
```

OUTPUT:

EMP_ID	FIRST_NAME	LAST_NAME	SALARY	DEPT_ID	JOIN_DATE
105	KRISH	SUNDAR	90000	10	01/23/2020
100	MOHAN	KUMAR	30000	12	05/17/2022
101	RAM	KUMAR	40000	12	04/27/2021

3. **Give the employee details whose employee name are not “Ram” and “Manoj”.**

```
select * from employee where first_name!='MANOJ' and first_name!='RAM'
```

OUTPUT:

EMP_ID	FIRST_NAME	LAST_NAME	SALARY	DEPT_ID	JOIN_DATE
105	KRISH	SUNDAR	90000	10	01/23/2020
100	MOHAN	KUMAR	30000	12	05/17/2022

4. **List the department details with name starts with “A”.**

```
select * from department where dept_name like 'A%';
```

OUTPUT:

DEPT_ID	DEPT_NAME	DEP_INCHARGE
15	ACCOUNTING	RAM

5. Select the 2nd highest salary earning employee details.

```
SELECT * FROM employee WHERE emp_id IN (SELECT emp_id FROM employee WHERE salary =
(SELECT MAX(salary) FROM employee WHERE salary < (SELECT MAX(salary) FROM employee)))
```

OUTPUT:

EMP_ID	FIRST_NAME	LAST_NAME	SALARY	DEPT_ID	JOIN_DATE
101	RAM	KUMAR	40000	12	04/27/2021

Parameter	marks
Perfection in the table(05)	
Query standards(05)	
Completion(05)	
Neatness(05)	
Prompt timing(05)	
Total(25)	

Result:

The given simple SQL-Queries are executed successfully.