**Exercise 1**

Employee

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| eid | e\_name | salary | dept | d\_address |

Department

|  |  |  |  |
| --- | --- | --- | --- |
| deptNo | d\_name | building | m\_id |

**Exercise 2**

----Create Table Department----

CREATE Table Department(

deptNo char(5),

d\_name varchar(100),

building varchar(100),

managerID char(5),

CONSTRAINT dep\_PK PRIMARY KEY(deptno),

);

----Create Table Department----

CREATE Table Employee(

eid char(5),

e\_name varchar(100),

salary char(15),

d\_address varchar(200),

dept char(5),

CONSTRAINT e\_PK PRIMARY KEY(eid),

CONSTRAINT e\_FK FORIGN KEY(dept) REFERENCES Department(deptNo),

);

----Insert Data to Department table----

INSERT into Department VALUES('dep01','IT Department’, ‘Block 1', 'emp001');

INSERT into Department VALUES('dep02','HR Department', 'Block 2', 'emp006');

INSERT into Department VALUES('dep03','Finance Department', 'Block 3', 'emp011');

INSERT into Department VALUES('dep04','Administration Department', 'Block 4', 'emp016');

INSERT into Department VALUES('dep05','Sales Department', 'Block 5', 'emp021');

----Insert Data to Employee table----

INSERT into Employee VALUES('emp001','Janaka', 'Rs.250,000', 'Kalubowila', 'dep01');

INSERT into Employee VALUES('emp002','Methuki', 'Rs.200,000', 'Ampara', 'dep02');

INSERT into Employee VALUES('emp003','Iresh', 'Rs.200,000', 'Aththidiya', 'dep03');

INSERT into Employee VALUES('emp004','Nimesha', 'Rs.150,000', 'Padukka', 'dep04');

INSERT into Employee VALUES('emp005','Suwahas' , 'Rs.150,000' , 'Dematagoda', 'dep05');

INSERT into Employee VALUES('emp006','Lakidu', 'Rs.150,000', 'Piliyandala', 'dep01');

INSERT into Employee VALUES('emp007','Hansidu', 'Rs.100,000', 'Malabe', 'dep02');

INSERT into Employee VALUES('emp008','Thisara', 'Rs.50,000', 'Kurunagala', 'dep03');

INSERT into Employee VALUES('emp009','Rivi', 'Rs.50,000', 'Piliyandala', 'dep04');

INSERT into Employee VALUES('emp010','Deshitha' , 'Rs.25,000' , 'Balangoda', 'dep05');

INSERT into Employee VALUES('emp011','Imesh', 'Rs.100,000', 'Kurunagala', 'dep01');

INSERT into Employee VALUES('emp012','Sachintha', 'Rs.100,000', 'Negambo', 'dep02');

INSERT into Employee VALUES('emp013','Deneth', 'Rs.50,000', 'Panadura', 'dep03');

INSERT into Employee VALUES('emp014','Kaveesha', 'Rs.75,000', 'Kotte', 'dep04');

INSERT into Employee VALUES('emp015','Shaliniya' , 'Rs.25,000' , 'Waththala', 'dep05');

INSERT into Employee VALUES('emp016','Ovini', 'Rs.100,000', 'Anuradhapura', 'dep01');

INSERT into Employee VALUES('emp017','Kavishki', 'Rs.100,000', 'Panadura', 'dep02');

INSERT into Employee VALUES('emp018','Surani', 'Rs.75,000', 'Kadawatha', 'dep03');

INSERT into Employee VALUES('emp019','Supuni', 'Rs.75,000', 'Kadawatha', 'dep04');

INSERT into Employee VALUES('emp020','Praveen' , 'Rs.50,000' , 'Mathara', 'dep05');

INSERT into Employee VALUES('emp021','Menusha', 'Rs.100,000', 'Kelaniya', 'dep01');

INSERT into Employee VALUES('emp022','Oshan', 'Rs.90,000', 'Ambuldeniya', 'dep02');

INSERT into Employee VALUES('emp023','Santhushie', 'Rs.150,000', 'Mathara', 'dep03');

INSERT into Employee VALUES('emp024','Geeshan', 'Rs.50,000', 'Kottawa', 'dep04');

INSERT into Employee VALUES('emp025','Kasun' , 'Rs.60,000' , 'Borelesgamuwa', 'dep05');

**Exercise 3**

a)

SELECT \*

FROM Employee;

b)

SELECT e.name

FROM Employee e, Department d

WHERE e.dept = d.deptno AND d.name = 'Administration Department';

c)

SELECT e.name

FROM Employee e, Department d

WHERE e.dept = d.deptno AND d.d\_name = 'Administration Department' AND e.salary > 'Rs.50,000';

d)

SELECT name

FROM Employee

WHERE eid <= 'emp005';

e)

SELECT e.name

FROM Employee e, Department d

WHERE e.dept = d.deptno AND e.eid > 'emp000' AND d.name = 'Administration Department' OR d.name = 'Sales Department';

f)

SELECT e.name

FROM Employee e, Department d

WHERE e.dept = d.deptno AND e.eid > 'emp000' AND d.name = 'Administration Department' AND d.name = 'Sales Department';

g)

SELECT e.name

FROM Employee e, Department d

WHERE e.dept = d.deptno AND e.eid > 'emp000' AND d.name = 'Administration Department' AND d.name != 'Sales Department';

h)

SELECT e.name,d.name

FROM Employee e, Department d

WHERE e.dept = d.deptno;

i)

SELECT d.name, COUNT(e.eid) AS 'No of Employees'

FROM Employee e, Department d

WHERE e.dept = d.deptno

GROUP BY d.name;

j)

SELECT d.name, COUNT(e.eid) AS 'No of Employees'

FROM Employee e, Department d

WHERE e.dept = d.deptno

GROUP BY d.name

HAVING COUNT(e.eid) > 10;

k)

SELECT e.eid

FROM Employee e, Department d

WHERE e.dept = d.deptno AND e.salary > 'Sales Department';

l)

SELECT e.eid

FROM Employee e, Department d

WHERE e.dept = d.deptno AND e.salary > 'Sales Department';

m)

SELECT empno, ename, deptno  
FROM e.dept  
WHERE e.salary > 'Sales Department'  
FROM emp e1  
WHERE e.deptno = d.deptno  
GROUP BY deptno  
ORDER BY deptno;