**MODULE: 5 (Database)**

**TASK 1. Create Table Name : Student and Exam**

Ans. 🡪

Make a DATABASE:-

* Make a table 1 (STUDENT):-

🡪code:-

CREATE TABLE STUDENT

(

ROLL\_NO INT PRIMARY KEY AUTO\_INCREMENT,

STUDENT\_NAME VARCHAR ( 50 ),

BRANCH VARCHAR ( 50 ),

)

INSERT VALUE:-

INSEAT TABLE STUDENT(ROLL\_NO,”NAME”,”BRANCH”)VALUE(1,”JAY”,”COMPUTER SCIENCE”);

INSEAT TABLE STUDENT(ROLL\_NO,”NAME”,”BRANCH”)VALUE(2,”SUHANI”,”ELECTRONIC AND COM.”);

INSEAT TABLE STUDENT(ROLL\_NO,”NAME”,”BRANCH”)VALUE(3,”KRITI”,”ELECTRONIC AND COM.”);

* Make a table 2 (EXAM):-

🡪code:-

CREATE TABLE EXAM

(

ROLL\_NO INT PRIMARY KEY AUTO\_INCREMENT,

S\_CODE VARCHAR ( 50 ),

MARKS INT,

P\_CODE VARCHAR ( 50 ),

ROLL\_NO\_FK INT,

FOREIGN KEY ( ROLL\_NO\_FK ) REFERENCES STUDENT( ROLL\_NO )

INSERT VALUE:-

INSEAT TABLE STUDENT(ROLL\_NO,”S\_CODE”,MARKS,”P\_CODE”)VALUE(1,”CS11”,50,”CS”);

INSEAT TABLE STUDENT(ROLL\_NO,”S\_CODE”,MARKS,”P\_CODE”)VALUE(1,”CS12”,60,”CS”);

INSEAT TABLE STUDENT(ROLL\_NO,”S\_CODE”,MARKS,”P\_CODE”)VALUE(2,”EC101”,66,”EC”);

INSEAT TABLE STUDENT(ROLL\_NO,”S\_CODE”,MARKS,”P\_CODE”)VALUE(2,”EC102”,70,”EC”);

INSEAT TABLE STUDENT(ROLL\_NO,”S\_CODE”,MARKS,”P\_CODE”)VALUE(3,”EC101”,45,”EC”);

INSEAT TABLE STUDENT(ROLL\_NO,”S\_CODE”,MARKS,”P\_CODE”)VALUE(3,”EC102”,50,”EC”);

**TASK.2 Create table given below :-**

ANS.🡪

MAKE A DATABASE:-

* MAKE A TABLE ( INFORMATION ) :-

CODE:-

CREATE TABLE INFORMATION

(

FIRST\_NAME VARCHAR(50),

LAST\_NAME VARCHAR (50),

ADDRESS VARCHAR (50),

CITY VARCHAR (50),

AGE INT

)

INSERT VALUE:-

INSERT INTO information (`FIRST\_NAME`, `LAST\_NAME`, `ADDRESS`, `CITY`, `AGE`) VALUES ('MICKEY', 'MOUSE', '123 FANTASY WAY', 'ANAHEIM', '73'), ('BAT', 'MAN', '321 CAVERN AVE', 'GOTHAM', '54'), ('WONDER ', 'WOMAN', '987 TRUTH WAY', 'PARADISE', '39'), ('DONALD ', 'DUCK', '555 QUACK STREET', 'MALLARD', '65'), ('BUGS', 'BUNNY', '567 CARROT STREET', 'RASCAL', '58'), ('WILEY', 'COYOTE', '999 ACME WAY', 'CANYON', '61'), ('CAT', 'WOMAN', '234 PURRFECT STREET', 'HAIRBALL', '32'), ('TWEETY ', 'BIRD', '543', 'ITOTLTAW', '28');

**TASK. 3. Create table given below: Employee and Incentive**

ANS. 🡪

MAKE A DATABASE

* MAKE A TABLE ( EMPLOYEE )

CODE:-

CREATE TABLE EMPLOYEE

(

EMP\_ID INT PRIMARY KEY AUTO\_INCREMENT,

FIRST\_NAME VARCHAR (50),

LAST\_NAME VARCHAR (50),

SALARY BIGINT,

JOINING\_DATE VARCHAR (50),

DEPARTMENT VARCHAR (50)

)

INSERT VALUE:-

INSERT INTO `employee` (`EMP\_ID`, `FIRST\_NAME`, `LAST\_NAME`, `SALARY`, `JOINING\_DATE`, `DEPARTMENT`) VALUES (NULL, 'JOHN', 'ABRAHAM', '1000000', '01-JAN-13 12:00AM', 'BANKING'),;

INSERT INTO `employee` (NULL, 'MICHAEL', 'CLARKE', '800000', '01-JAN-13 12:00AM', 'INSURANCE'),

INSERT INTO `employee` (NULL, 'ROY', 'THOMAS', '700000', '01-FEB-13 12:00AM', 'BANKING'),

INSERT INTO `employee` (NULL, 'TOM', 'JOSE', '600000', '01-FEB-13 12:00AM', 'INSURANCE'),

INSERT INTO `employee` (NULL, 'JERRY', 'PINTO', '650000', '01-FEB-13 12:00AM', 'INSURANCE'),

INSERT INTO `employee` (NULL, 'PHILIP', 'MATHEW', '750000', '01-JAN-13 12:00AM', 'SERVICES'),

INSERT INTO `employee` (NULL, 'TESTNAME1', '123', '650000', '01-JAN-13 12:00AM', 'SERVICES'),

INSERT INTO `employee` (NULL, 'TESTNAME2', 'LNAME', '600000', '01-FEB-13 12:00AM', 'INSURANCE');

* MAKE A TABLE ( Incentive ) :-

CODE:-

CREATE TABLE INCENTIVE

(

EMP\_REF\_ID INT PRIMARY KEY AUTO\_INCREMENT,

INCENTIVE\_DATE VARCHAR(50),

INCENTIVE\_AMOUNT BIGINT,

EMP\_ID\_FK INT,

FOREIGN KEY(EMP\_ID\_FK)REFERENCES employee(EMP\_ID)

)

INSERT VALUE:-

INSERT INTO `incentive` (`EMP\_REF\_ID`, `INCENTIVE\_DATE`, `INCENTIVE\_AMOUNT`, `EMP\_ID\_FK`) VALUES (NULL, '01-FEB-13', '5000', '1'),

INSERT INTO `incentive` (NULL, '01-FEB-13', '3000', '2'),

INSERT INTO `incentive` (NULL, '01-FEB-13', '4000', '3'),

INSERT INTO `incentive` (NULL, '01-JAN-13', '4500', '1'),

INSERT INTO `incentive` (NULL, '01-JAN-13', '3500', '2');

**QUE.(a), Get First\_Name from employee table using Tom name “Employee Name”.**

ANS 🡪CODE:-

SELECT\*FROM employee WHERE EMP\_ID=1

**QUE.b) Get FIRST\_NAME, Joining Date, and Salary from employee table.**

ANS 🡪CODE:-

SELECT FIRST\_NAME,SALARY,JOINING\_DATE FROM employee

**QUE.(c) Get all employee details from the employee table order by First\_Name Ascending and Salary descending?**

ANS. 🡪CODE:-

SELECT \*FROM employee ORDER BY FIRST\_NAME ASC;

SELECT \*FROM employee ORDER BY SALARY DESC

**QUE.( d) Get employee details from employee table whose first name contains ‘J’**

ANS. 🡪CODE :-

SELECT \* FROM employee WHERE FIRST\_NAME LIKE 'J%'

**QUE.( e ) Get department wise maximum salary from employee table order by salary ascending?**

ANS. 🡪CODE :-

SELECT \* FROM employee ORDER BY SALARY ASC

**QUE.( f ) Select first\_name, incentive amount from employee and incentives table for those employees who have incentives and incentive amount greater than 3000**

ANS. 🡪CODE :-

SELECT \* FROM incentive WHERE INCENTIVE\_AMOUNT>3000

**QUE.( g ) Create After Insert trigger on Employee table which insert records in view table**

ANS. 🡪CODE :-

INSERT INTO `employee` (`EMP\_ID`, `FIRST\_NAME`, `LAST\_NAME`, `SALARY`, `JOINING\_DATE`, `DEPARTMENT`) VALUES (NULL, 'JOHN', 'ABRAHAM', '1000000', '01-JAN-13 12:00AM', 'BANKING'),;INSERT INTO `employee` (NULL, 'MICHAEL', 'CLARKE', '800000', '01-JAN-13 12:00AM', 'INSURANCE'),INSERT INTO `employee` (NULL, 'ROY', 'THOMAS', '700000', '01-FEB-13 12:00AM', 'BANKING'),INSERT INTO `employee` (NULL, 'TOM', 'JOSE', '600000', '01-FEB-13 12:00AM', 'INSURANCE'),INSERT INTO `employee` (NULL, 'JERRY', 'PINTO', '650000', '01-FEB-13 12:00AM', 'INSURANCE'),INSERT INTO `employee` (NULL, 'PHILIP', 'MATHEW', '750000', '01-JAN-13 12:00AM', 'SERVICES'),INSERT INTO `employee` (NULL, 'TESTNAME1', '123', '650000', '01-JAN-13 12:00AM', 'SERVICES'),INSERT INTO `employee` (NULL, 'TESTNAME2', 'LNAME', '600000', '01-FEB-13 12:00AM', 'INSURANCE');

**TASK .4 Create table given below: Salesperson and Customer**

ANS. 🡪

MAKE A DATABASE

* MAKE A TABLE ( SELSEPERSON )

CODE :-

CREATE TABLE SALSEPORSON

(

PK\_SNO INT PRIMARY KEY,

SNAME VARCHAR (50),

CITY VARCHAR (50),

COMM VARCHAR (50)

)

INSERT VALUE :-

INSERT INTO `salseporson` (`PK\_SNO`, `SNAME`, `CITY`, `COMM`) VALUES ('1001', 'PEEL', 'LONDON', '.12'),

INSERT INTO `salseporson` ('1002', 'SERRES', 'SAN JOSE', '.13'),

INSERT INTO `salseporson` ('1004', 'MOTILKA', 'LONDON', '.11')

INSERT INTO `salseporson`, ('1007', 'RAFKIN', 'BARCELONA', '.15'),

INSERT INTO `salseporson` ('1003', 'AXELROD', 'NEW YORK', '.1');

* MAKE A TABLE ( CUSTOMER )

CODE:-

CREATE TABLE CUSTOMER

(CNM INT PRIMARY KEY,

CNAME VARCHAR (50),

CITY VARCHAR (50),

RATING INT ,

PK\_SNO\_KFNT,

FOREIGN KEY (PK\_SNO\_KF)REFERENCESsalseporson(PK\_SNO)

)

INSERT VALUE :-

INSERT INTO `customer` (`CNM`, `CNAME`, `CITY`, `RATING`, `PK\_SNO\_KF`) VALUES ('201', 'HOFFMAN', 'LONDON', '100', '1001'), ('202', 'GIOVANNE', 'ROE', '200', '1003'), ('203', 'LIU', 'SAN JOSE', '300', '1002'), ('204', 'GRASS', 'BARCELOAN', '100', '1002'), ('206', 'CLEMENS', 'LONDON', '300', '1007'), ('207', 'PEREIRA', 'ROE', '100', '1004');

**QUE.(B)Names and cities of all salespeople in London with commission above 0.12**

ANS. 🡪CODE :-

SELECT \* FROM salseporson WHERE COMM>.12

**QUE.(C) All salespeople either in Barcelona or in London**

ANS. 🡪CODE :-

SELECT \* FROM salseporson WHERE CITY="BARCELONA"OR CITY="LONDON"

**QUE.(D) All salespeople with commission between 0.10 and 0.12. (Boundary values should be excluded).**

ANS. 🡪CODE :-

SELECT \* FROM salseporson WHERE COMM =.11

**QUE.(E)All customers excluding those with rating <= 100 unless they are located in Rome**

ANS. 🡪CODE :-

SELECT \* FROM customer WHERE RATING<=100 AND CITY NOT IN('ROE')