1. Create table Student and Exam.

**Student**

CREATE TABLE student

(

Roll\_no int PRIMARY KEY AUTO\_INCREMENT,

Student\_name varchar (50),

branch varchar (50)

)

**Insert values**

INSERT INTO student(Roll\_no,Student\_name,branch) VALUES(1,"jay","computer science");

INSERT INTO student(Roll\_no,Student\_name,branch) VALUES(2,"suhani","electronic and com");

INSERT INTO student(Roll\_no,Student\_name,branch) VALUES(3,"kriti"," electronic and com ");

**Exam**

CREATE TABLE Exam

(

Roll\_number 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**

INSERT INTO `exam` (`Roll\_number`, `S\_code`, `marks`, `P\_code`, `Roll\_no\_fk`) VALUES (NULL, 'CS11', '50', 'CS', '1'),

INSERT INTO `exam` (`Roll\_number`, `S\_code`, `marks`, `P\_code`, `Roll\_no\_fk`) VALUES (NULL, 'CS12', '60', 'CS', '1'),

INSERT INTO `exam` (`Roll\_number`, `S\_code`, `marks`, `P\_code`, `Roll\_no\_fk`) VALUES (NULL, 'EC101', '66', 'EC', '2'),

INSERT INTO `exam` (`Roll\_number`, `S\_code`, `marks`, `P\_code`, `Roll\_no\_fk`) VALUES (NULL, 'EC102', '70', 'EC', '2'),

INSERT INTO `exam` (`Roll\_number`, `S\_code`, `marks`, `P\_code`, `Roll\_no\_fk`) VALUES (NULL, EC101', '45', 'EC', '3'),

INSERT INTO `exam` (`Roll\_number`, `S\_code`, `marks`, `P\_code`, `Roll\_no\_fk`) VALUES (NULL,'EC102', '45', 'EC', 3);

Q.2. Create table information in person\_data database

**information**

CREATE TABLE information

(

First\_name varchar (50) PRIMARY KEY AUTO INCREMENT,

Last\_name varchar (50),

Address varchar (50),

City varchar (50),

Age int

)

**Insert values**

INSERT INTO `information` (`first\_name`, `last\_name`, `address`, `city`, `age`) VALUES ('MICKEY', 'MOUSE', '123 FANTASY WAY', 'ANAHEIM', '73'),

INSERT INTO `information` (`first\_name`, `last\_name`, `address`, `city`, `age`) VALUES ('BAT', 'MAN', '321 CAVERN AVE', 'GOTHAM', '54'),

INSERT INTO `information` (`first\_name`, `last\_name`, `address`, `city`, `age`) VALUES ('WONDER', 'WOMAN', '987 TRUTH WAY', 'PARADISE', '39'),

INSERT INTO `information` (`first\_name`, `last\_name`, `address`, `city`, `age`) VALUES ('DONALD', 'DUCK', '555 QUACK STREET', 'MALLARD', '65'),

INSERT INTO `information` (`first\_name`, `last\_name`, `address`, `city`, `age`) VALUES ('BUGS', 'BUNNY', '567 CARROT STREET', 'RASCAL', '58'),

INSERT INTO `information` (`first\_name`, `last\_name`, `address`, `city`, `age`) VALUES ('WILEY', 'COYOTE', '999 ACME WAY', 'CANYON', '61'),

INSERT INTO `information` (`first\_name`, `last\_name`, `address`, `city`, `age`) VALUES ('CAT', 'WOMAN', '234 PURRFACT STREET', 'HAIRBALL', '32'),

INSERT INTO `information` (`first\_name`, `last\_name`, `address`, `city`, `age`) VALUES ('TWEETY', 'BIRD', '543', 'ITOTLTAW', '28');

Q.3. Create table given below:

1) **Employee**

CREATE TABLE Employee

(

Employee\_id int PRIMARY KEY AUTO\_INCREMENT,

first\_name varchar (50),

last\_name varchar (50),

salary int,

joining\_date varchar (50),

department varchar (50)

)

**Insert values**

INSERT INTO `employee` (`Employee\_id`, `first\_name`, `last\_name`, `salary`, `joining\_date`, `department`) VALUES (NULL, 'JOHN', 'ABRAHAM', '1000000', '01-JAN-13 12.00.00 AM', 'BANKING'),

INSERT INTO `employee` (`Employee\_id`, `first\_name`, `last\_name`, `salary`, `joining\_date`, `department`) VALUES (NULL, 'MICHAEL', 'CLARKE', '800000', '01-JAN-13 12.00.00 AM', 'INSURANCE'),

INSERT INTO `employee` (`Employee\_id`, `first\_name`, `last\_name`, `salary`, `joining\_date`, `department`) VALUES (NULL, 'ROY', 'THOMAS', '700000', '01-FEB-13 12.00.00 AM', 'BANKING'),

INSERT INTO `employee` (`Employee\_id`, `first\_name`, `last\_name`, `salary`, `joining\_date`, `department`) VALUES (NULL, 'TOM', 'JOSE', '600000', '01-FEB-13 12.00.00 AM', 'INSURANCE'),

INSERT INTO `employee` (`Employee\_id`, `first\_name`, `last\_name`, `salary`, `joining\_date`, `department`) VALUES (NULL, 'JERRY', 'PINTO', '650000', '01-FEB-13 12.00.00 AM', 'INSURANCE'),

INSERT INTO `employee` (`Employee\_id`, `first\_name`, `last\_name`, `salary`, `joining\_date`, `department`) VALUES (NULL, 'PHILIP', 'MATHEW', '750000', '01-JAN-13 12.00.00 AM', 'SERVICES'),

INSERT INTO `employee` (`Employee\_id`, `first\_name`, `last\_name`, `salary`, `joining\_date`, `department`) VALUES (NULL, 'DILIP', 'DABHI', '650000', '01-JAN-13 12.00.00 AM', 'SERVICES'),

INSERT INTO `employee` (`Employee\_id`, `first\_name`, `last\_name`, `salary`, `joining\_date`, `department`) VALUES (NULL, 'SHIVARSH', 'VAGHELA', '600000', '01-FEB-13 12.00.00 AM', 'INSURANCE');

2) **Incentive**

CREATE TABLE Incentive

(

Employee\_ref\_id int PRIMARY KEY AUTO\_INCREMENT,

incentive\_date varchar (50),

incentive\_amount int

)

**Insert value**

INSERT INTO `incentive` (`Employee\_ref\_id`, `incentive\_date`, `incentive\_amount`) VALUES ('1', '01-FEB-13', '5000'),

INSERT INTO `incentive` (`Employee\_ref\_id`, `incentive\_date`, `incentive\_amount`) VALUES ('2', '01-FEB-13', '3000'),

INSERT INTO `incentive` (`Employee\_ref\_id`, `incentive\_date`, `incentive\_amount`) VALUES ('3', '01-FEB-13', '4000'),

INSERT INTO `incentive` (`Employee\_ref\_id`, `incentive\_date`, `incentive\_amount`) VALUES ('1', '01-JAN-13', '4500'),

INSERT INTO `incentive` (`Employee\_ref\_id`, `incentive\_date`, `incentive\_amount`) VALUES ('2', '01-JAN-13', '3500');

**A) Get First\_Name from employee table using Tom name “Employee Name”**

SELECT \* FROM employee WHERE Employee\_id=4

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

SELECT first\_name,salary,joining\_date FROM employee

**C) Get all employee details from the employee table order by First\_Name Ascending and Salary descending?**

SELECT \* FROM employee ORDER BY first\_name ASC

SELECT \* FROM employee ORDER BY salary DESC

**D) Get employee details from employee table whose first name contains ‘J’.**

SELECT \* FROM employee WHERE first\_name LIKE 'j%'

**E) Get department wise maximum salary from employee table order by salary ascending?**

SELECT \* FROM employee ORDER by salary ASC

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

SELECT \* FROM incentive WHERE incentive\_amount>3000

**G) Create After Insert trigger on Employee table which insert records in view table**

**View table**

CREATE TABLE view\_table

(

Employee\_id int,

first\_name varchar (50),

last\_name varchar (50),

salary int,

joining\_date varchar (50),

department varchar (50),

date\_time timestamp,

action\_performed varchar (50)

)

**Insert trigger**

DELIMITER $$

CREATE TRIGGER insert\_trigger AFTER INSERT ON employee FOR EACH ROW

BEGIN

INSERT INTO view\_table(Employee\_id,first\_name,last\_name,salary,joining\_date,department,action\_performed) VALUES(new.employee\_id,new.first\_name,new.last\_name,new.salary,new.joining\_date,new.department,"record inserted");

END

**Insert value**

INSERT INTO `employee` (`Employee\_id`, `first\_name`, `last\_name`, `salary`, `joining\_date`, `department`) VALUES (NULL, 'dilip', 'dabhi', '300000', '22/05/2020 12.00 am', 'income tax'),

INSERT INTO `employee` (`Employee\_id`, `first\_name`, `last\_name`, `salary`, `joining\_date`, `department`) VALUES (NULL, 'shivarsh', 'vaghela', '200000', '30/01/2004', 'collector');

* **Create table given below: Salesperson and Customer**

CREATE TABLE Salesperson

(

SNO INT PRIMARY KEY,

SNAME VARCHAR (50),

CITY VARCHAR (50),

COMM VARCHAR (50)

)

**Insert values**

INSERT INTO `salesperson` (`SNo`, `SNAME`, `CITY`, `COMM`) VALUES ('1001', 'Peel', 'London', '. 12'),

INSERT INTO `salesperson` (`SNo`, `SNAME`, `CITY`, `COMM`) VALUES ('1002', 'Serres', 'San Jose', '. 13'),

INSERT INTO `salesperson` (`SNo`, `SNAME`, `CITY`, `COMM`) VALUES ('1004', 'Motika', 'London', '. 11'),

INSERT INTO `salesperson` (`SNo`, `SNAME`, `CITY`, `COMM`) VALUES ('1007', 'Rafkin', 'Barcelona', '. 15'),

INSERT INTO `salesperson` (`SNo`, `SNAME`, `CITY`, `COMM`) VALUES ('1003', 'Axelord', 'New york', '. 1');

* **Customer**

CREATE TABLE Customer

(

CNM int PRIMARY KEY,

CNAME varchar (50),

CITY varchar (50),

RATING int,

SNo\_fk int,

FOREIGN KEY(SNo\_fk)REFERENCES salesperson(SNo)

)

**Insert values**

**Insert value**

INSERT INTO `customer` (`CNM`, `CNAME`, `CITY`, `RATING`, `SNo\_fk`) VALUES ('201', 'Hoffman', 'London', '100', '1001'),

INSERT INTO `customer` (`CNM`, `CNAME`, `CITY`, `RATING`, `SNo\_fk`) VALUES ('202', 'Giovvane', 'Roe', '200', '1003'),

INSERT INTO `customer` (`CNM`, `CNAME`, `CITY`, `RATING`, `SNo\_fk`) VALUES ('203', 'Liu', 'San Jose', '300', '1002'),

INSERT INTO `customer` (`CNM`, `CNAME`, `CITY`, `RATING`, `SNo\_fk`) VALUES ('204', 'Grass', 'Barcelona', '100', '1002'),

INSERT INTO `customer` (`CNM`, `CNAME`, `CITY`, `RATING`, `SNo\_fk`) VALUES ('206', 'Clemens', 'London', '300', '1007'),

INSERT INTO `customer` (`CNM`, `CNAME`, `CITY`, `RATING`, `SNo\_fk`) VALUES ('207', 'Pereira', 'Roe', '100', '1004');

**Retrieve the below data from above table**

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

SELECT \* FROM salesperson WHERE COMM>.12

**C) All salespeople either in Barcelona or in London**

SELECT \* FROM salesperson WHERE CITY='barcelona' OR CITY='london'

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

SELECT \* FROM salesperson WHERE COMM =.11

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

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

* **What do you understand by database?**

**Ans:-**