**ASSIGNMENT -1**

1. create a database called 'assignment' (Note please do the assignment tasks in this database)

Ans: create database assignment;

1. Create the tables from assignment\_tables.sql and enter the records as specified in it.

mysql> create table movies (id integer, title varchar(50), category varchar(25));

mysql> insert into movies values(11,"Silent Voice",'Animations'),(12,"Rings",'Fantacy');

mysql> create table rentals(memid integer, first\_name varchar(25), last\_name varchar(25), movieid integer);

mysql> insert into rentals values(9,'Deepali','Borse', 17),(10,'Anushka','Borse', NULL);

mysql> CREATE TABLE students (id int(11) NOT NULL,name varchar(25) DEFAULT NULL, marks float(6,2) DEFAULT NULL,PRIMARY KEY ( id )) ;

mysql> INSERT INTO students VALUES (102, 'Ansh', 79.00);

Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO students VALUES (101, 'Arushi', 99.00);

Query OK, 1 row affected (0.01 sec)

mysql> CREATE TABLE emp (

emp\_no int(11) NOT NULL,

birth\_date date NOT NULL,

first\_name varchar(14) NOT NULL,

last\_name varchar(16) NOT NULL,

gender enum('M','F') NOT NULL,

hire\_date date NOT NULL,

salary float(8,2) DEFAULT 7850.00

) ;

mysql> INSERT INTO emp VALUES (10012,'1960-10-04','Patricio','Bridgland','M','1992-12-18',3475.00),(10013,'1963-06-07','Eberhardt','Terkki','M','2020-02-23',7850.00);

mysql> create table employee (empid integer, fname varchar(30), lname varchar(30), deptno tinyint, salary decimal(10,2));

mysql> insert into employee values(2100,'Vishakha','Waghare',20,2300),(780,'Manasi','Jadhav',10,2000) ;

mysql> CREATE TABLE `station` (

`id` int(11) DEFAULT NULL,

`city` varchar(21) DEFAULT NULL,

`state` char(4) DEFAULT NULL,

`lat\_n` float(7,2) DEFAULT NULL,

`long\_w` float(7,2) DEFAULT NULL

) ;

mysql> INSERT INTO `station` VALUES (2712, "Pune", "PU", 89.21, 122.32);

mysql> CREATE TABLE `city` (

`id` int(11) DEFAULT NULL,

`name` varchar(17) DEFAULT NULL,

`countrycode` varchar(3) DEFAULT NULL,

`district` varchar(30) DEFAULT NULL,

`population` int(11) DEFAULT NULL

) ;

mysql> insert into city values (42203, "Nashik", "IND", "Nashik", 6107187);

3. Create a table called authors with the following columns

authorid , name

- choose appropriate datatypes for the columns

a) Insert the following data into the table

1, J K Rowling

2, Thomas Hardy

3, Oscar Wilde

4, Sidney Sheldon

5, Alistair Maclean

6, Jane Autsen

b) Add a couple of authors of your choice

c) Change 'Alistair Maclean' to 'Alastair McNeal'

1. mysql> create table authors(authorid tinyint, name varchar(255));

mysql> insert into authors values(1, 'J K Rowling'),(2,'Thomas Hardy'),(3, 'Oscar Wilde'),(4,'Sidney Sheldon'),(5,'Alistair Maclean'),(6,'Jane Autsen');

1. mysql> insert into authors values(7,'Kusumagraj'), (8, 'Pralhad Keshav Atre'),(9, 'BAhinabai Chaudhari'),(10, 'Vishwas Patil');
2. mysql> update authors set name= 'Alastair McNeal' where authorid = 5;

4. Create a table called Books with the following columns

bookid, title, authorid

- choose appropriate datatypes for the columns

a) Insert the following records

1,Harry Potter and the Philosopher's Stone,1

2,Harry Potter and the Chamber of Secrets,1

3,Harry Potter and the Half-Blood Prince,1

4,Harry Potter and the Goblet of Fire,1

5,Night Without End,5

6,Fear is the Key,5

7,Where Eagles Dare,5

8,Sense and Sensibility,6

9,Pride and Prejudice,6

10,Emma,6

11,Random Book,22

b) Delete 'Random Book' from the table.

1. mysql> create table Books(bookid tinyint, title varchar(100), authorid tinyint);

mysql> insert into Books values(1,"Harry Potter and the Philosopher's Stone",1),(2,"Harry Potter and the Chamber of Secrets",1),(3,"Harry Potter and the Half-Blood Prince",1),(4,"Harry Potter and the Goblet of Fire",1),(5,"Night Without End",5),(6,"Fear is the Key",5),(7,"Where Eagles Dare",5),(8,"Sense and Sensibility",6),(9,"Pride and Prejudice",6),(10,"Emma",6),(11,"Random Book",22);

1. mysql> delete from Books where bookid = 11;

5. Rename the table Books to Favbooks and Authors to Favauthors.

mysql> alter table Books Rename to Favbooks;

mysql> alter table authors Rename to Favauthors;

6. Create the following tables. Use auto increment wherever applicable

a. Products

product\_id - primary key

product\_name - cannot be null and only unique values are allowed

description

supplier\_id - foreign key of supplier table

b. Suppliers

supplier\_id - primary key

supplier\_name

location

c. Stock

id - primary key

product\_id - foreign key of product table

balance\_stock

1. mysql> CREATE TABLE Product(product\_id INT NOT NULL, product\_name VARCHAR(100) NOT NULL UNIQUE, PRIMARY KEY(product\_id));

mysql> alter table Product add column supplier\_id int;

1. CREATE TABLE Suppliers(supplier\_id INT, supplier\_name VARCHAR(100), location VARCHAR(100), PRIMARY KEY(supplier\_id));

mysql> alter table product add foreign key(supplier\_id) references suppliers(supplier\_id);

1. mysql> create table stocks(id int, product\_id int, balance\_stock int, primary key(id), foreign key(product\_id) references product(product\_id));

7. Enter some records into the three tables.

mysql> insert into suppliers values(101,"NITIN","PUNE");

mysql> insert into product values(501,"VIVO SE",101);

mysql> insert into stocks values(991, 501, 1031);

mysql> insert into suppliers values(102,"YASH","NASHIK"),(103,"SNEHA","PUNE"),(104,"RANJIT","MUMBAI"),(105,"ROHIT","JALNA"),(106,"SHUBHAM","NASHIK"),(107,"RUSHI","SANGMNER");

mysql> insert into product values(502, "SAMSUNG A30",102), (503,"VIVO Y83 PRO",103), (504, "MI M30",104), (505, "XOLO 900",105), (506, "OPPO A36", 106), (507, "DELL INSPIRATION", 107);

mysql> insert into stocks values(992,502,4982),(993,503,9800),(994,504,234),(995, 505,1211),(996,506,2392),(997,507,3822);

8. Modify the supplier table to make supplier name unique and not null.

mysql> alter table suppliers modify column supplier\_name varchar(100) unique not null;

9. Modify the emp table as follows

a. Add a column called deptno

b. Set the value of deptno in the following order

deptno = 20 where emp\_id is divisible by 2

deptno = 30 where emp\_id is divisible by 3

deptno = 40 where emp\_id is divisible by 4

deptno = 50 where emp\_id is divisible by 5

deptno = 10 for the remaining records.

1. mysql> alter table emp add column deptno int;
2. mysql> update emp set deptno = ( CASE

-> WHEN (emp\_no % 2) THEN 20

-> WHEN (emp\_no % 3) THEN 30

-> WHEN (emp\_no % 4) THEN 40

-> WHEN (emp\_no % 5) THEN 50

-> ELSE 10

-> END);

10. Create a unique, hash index on the emp\_id column.

mysql> create unique index uni\_index on emp(emp\_no);