

MySQL Assignments

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Clear screen of MySQL

```
\! clear
```

Create Database

```
CREATE DATABASE new_db;
```

Show all available databases in the current MySQL database server

Use or

```
SHOW DATABASES;
```

change current database to which you want to work

```
USE new_db;
```

Drop a database with a specified name permanently

```
DROP DATABASE new_db;
```

Show all tables

in a current database.

```
SHOW TABLES;
```

Create a new table

Adding column to table

```
Create table student (
```

```
Name varchar(20)
```

```
);
```

Dropping column from table

```
alter table student drop column
```

```
name;
```

ADD Primary key to table

DROP Primary key

```
ALTER TABLE student
```

```
ADD PRIMARY KEY (rollnm);
```

from table Drop table from

database

```
DROP TABLE student;
```

Show columns of a table

```
SHOW COLUMNS FROM student;
```

MODIFY DATA IN TABLE

Insert new row into table

```
INSERT INTO `students` (firstname, lastname, marks) VALUES ('karthik', 'prabal', 90);
```

Insert multiple rows into a table

```
INSERT INTO `students` (firstname, lastname,  
marks) VALUES
```

```
('vinay', 'kodagu', 45),
```

```
('Ganesh', 'pai', 90);
```

Update all rows in a table

```
UPDATE `students`
```

```
SET regnum= 00001;
```

Update data for a set of rows specified by a condition in WHERE clause.

1) **Create Database with name Programs.**

```
CREATE DATABASE `Programs`;  
USE `Programs`;
```

2) **Create following tables with specified attributes. If required, provide primary**

key Student: Name, RegNumber, email, Phone,

Instructor: Name, EmpID, email, Designation,

Phone Course: Name, CourseID, ContactHours,

InstID Take: StudentID, CourseID, Grade

```
CREATE TABLE `Student` (  
  `Name` VARCHAR(100),  
  `RegNumber` VARCHAR(20) PRIMARY KEY,  
  `email` VARCHAR(100),  
  `phone` VARCHAR(15)  
);
```

```
CREATE TABLE `Instructor` (  
  `Name` VARCHAR(100),  
  `EmpID` VARCHAR(20) PRIMARY KEY,  
  `email` VARCHAR(100),  
  `designation` VARCHAR(50),  
  `phone` VARCHAR(15)  
);
```

```
CREATE TABLE `Course` (  
  `Name` VARCHAR(100),  
  `Courseid` VARCHAR(20) PRIMARY KEY,  
  `ContactHours` INT,  
  `Instid` VARCHAR(20),  
  FOREIGN KEY (`Instid`) REFERENCES `Instructor`(`EmpID`)  
);
```

```
CREATE TABLE `Take` (  
  `Studentid` VARCHAR(20),
```

```

`Courseid` VARCHAR(20),
`Grade` VARCHAR(2),
PRIMARY KEY (`Studentid`, `Courseid`),
FOREIGN KEY (`Studentid`) REFERENCES `Student`(`RegNumber`),
FOREIGN KEY (`Courseid`) REFERENCES `Course`(`Courseid`)
);

```

3) Populate data into all tables

```

INSERT INTO `Student` (Name, RegNumber, email, phone) VALUES
('Amit Kumar', '10', 'amit.kumar@gmail.com', '321'),
('Pooja Sharma', '11', 'pooja.sharma@yahoo.com', '654'),
('Ravi Patel', '12', 'ravi.patel@gmail.com', '987');

```

```

INSERT INTO `Instructor` (Name, EmpID, email, designation, phone) VALUES
('Sita Rani', '10', 'sita.rani@gmail.com', 'Professor', '32100'),
('Rajesh Singh', '11', 'rajesh.singh@yahoo.com', 'Lecturer', '65432'),
('Anita Desai', '12', 'anita.desai@gmail.com', 'Associate Professor', '98765');

```

```

INSERT INTO `Course` (Name, Courseid, ContactHours, Instid) VALUES
('Computer Science', '10', '4-0', '10'),
('Mathematics', '11', '3-1', '11'),
('Physics', '12', '2-2', '12');

```

```

INSERT INTO `Take` (Studentid, Courseid, Grade) VALUES
('10', '10', 'B'),
('11', '11', 'A'),
('12', '12', 'C');

```

4) Create empty table NewCourse. Structure of this new table should be same as existing table "Course".

```

CREATE TABLE `NewCourse` (
  `Name` VARCHAR(100),
  `Courseid` VARCHAR(20) PRIMARY KEY,
  `ContactHours` INT,
  `Instid` VARCHAR(20),
  FOREIGN KEY (`Instid`) REFERENCES `Instructor`(`EmpID`)
);

```

5) Transfer data from table Course to table NewCourse.

```
INSERT INTO `NewCourse` (Name, Courseid, ContactHours, Instid)
SELECT Name, Courseid, ContactHours, Instid
FROM `Course`;
```