Answer Script

Question No. 1
Create tables a. Make a student table b. Make a Library table c. Make a Fees table Create table with proper relations.
Answer No. 1
a. CREATE TABLE student(Id CHAR(4), Name VARCHAR(50), Email VARCHAR(50), Address VARCHAR(255), Age INT); b. CREATE TABLE library(BookName VARCHAR(50), BookId CHAR(5), StudentId CHAR(4)); c. CREATE TABLE fees (TrxlId CHAR(16), StudentId CHAR(4), Amount INT, PaymentDate DATE);

Question No. 2
Add proper constraints with the No 1 question
Answer No. 2

a.

```
CREATE TABLE student(
        Id CHAR(4) PRIMARY KEY,
        Name VARCHAR(50) NOT NULL,
        Email VARCHAR(50) UNIQUE,
        Address VARCHAR(255),
        Age INT CHECK(Age>=10)
);
```

b.

```
CREATE TABLE library(
        BookName VARCHAR(50),
        BookId CHAR(5) PRIMARY KEY,
        StudentId CHAR(4),
        FOREIGN KEY (StudentId) REFERENCES student(Id)
);
```

c.

```
CREATE TABLE fees (
    TrxlId CHAR(16) PRIMARY KEY,
    StudentId CHAR(4),
    Amount INT,
    PaymentDate DATE,
    FOREIGN KEY (StudentId) REFERENCES student(Id)
);
```

Question No. 3
Write the differences between data and information
Answer No. 3

Data	Information
Unorganized	Organized
Meaningless	Meaningful
Unstructured	Structured

Question No. 4
In MySQL, Update and Delete query wasn't executing, what was the reason and how to run those query? Write the code to enable the feature.
Answer No. 4
MySql has by default a safety feature enabled to prevent unintentional data modification . That is why the Update and Delete query wasn't executing. In Order to run those query, execute SET SQL_SAFE_UPDATES = 0; In doing so you are essentially turning off this safety feature You can turn this safety feature on by executing SET SQL_SAFE_UPDATES = 1;

Answer the following questions(5-10) with this table data. Table name Employee.

EmployeeID	FirstName	LastName	Age	Department
1	John	Doe	28	Sales
2	Jane	Smith	32	Marketing
3	Michael	Johnson	35	Finance
4	Sarah	Brown	30	HR
5	William	Davis	25	Engineering
6	Emily	Wilson	28	Sales
7	Robert	Lee	33	Marketing
8	Laura	Hall	29	Finance
9	Thomas	White	31	HR
10	Olivia	Clark	27	Engineering

```
CREATE DATABASE assignmentone;
USE assignmentone;

CREATE TABLE employee(
        EmployeeID CHAR(4) PRIMARY KEY,
        FirstName VARCHAR(25),
        LastName VARCHAR(25) NOT NULL,
        Age INT,
        Department VARCHAR(20) NOT NULL
);
```

Question No. 5
Write a query to show the distinct department names
Answer No. 5
SELECT DISTINCT Department FROM employee;

Question No. 6
Write a query to show the LastNames of the employees sorted by descending ages
Answer No. 6
SELECT LastName FROM employee ORDER BY Age DESC;

Question No. 7
Write a query to show the employee LastName whose age is greater than 30 and works in Marketing department.
Answer No. 7
SELECT LastName FROM employee WHERE (Age>30) AND (Department='Marketing');

Question No. 8
Write a query to select all the employees
Answer No. 8
SELECT * FROM employee;

Question No. 9
Write a query to get employees whose names includes ‘son’
Answer No. 9
SELECT * FROM employee WHERE (FirstName LIKE '%son%') OR (LastName LIKE '%son%');

Question No. 10
Write a query to get the engineers
Answer No. 10
SELECT * FROM employee WHERE Department='Engineering';