Answer Script

Question No. 01
Create tables a. Make a student table b. Make a Library table c. Make a Fees table Create table with proper relations.

Answer No. 01

```
CREATE database Assignment1;

use Assignment1;
```

a)

```
create Table Student
(
 ID CHAR(4) PRIMARY KEY,

 Name varchar(50),

 Email varchar(60),

 Contact varchar(15),

 Address varchar(100),

 Department varchar(50),

 Year INT
);
```

b)

```
Create Table Library
(
```

```
    Book_name varchar(50) primary key,

    Writer_Name varchar(50),

    Who_Hired_ID char(4),

    foreign key(who_Hired_ID) references Student(ID)
);
```

c)

```
Create table Fees
(
    Student_ID varchar(4) Primary key,

    Student_Name varchar(50),

    Paid_Fee decimal(10,2),

    Due_Fee decimal(10,2),

    Total_Fee decimal(10,2),

    foreign key(Student_ID) references Student(ID)
);
```

Question No. 02
Add proper constraints with the No 1 question
Answer No. 02

```
CREATE database Assignment1;

use Assignment1;

create Table Student
```

```
(
 ID CHAR(4) PRIMARY KEY,

 Name varchar(50) NOT NULL,

 Email varchar(60) UNIQUE,

 Contact varchar(15) NOT NULL,

 Address varchar(100),

 Department varchar(50) NOT NULL,

 Year INT Check (YEAR>=1 AND YEAR <=4)
);

Create Table Library
(
    Book_name varchar(50) primary key,

    Writer_Name varchar(50),

    Who_Hired_ID char(4),

    foreign key(who_Hired_ID) references Student(ID)
);

Create table Fees
(
    Student_ID varchar(4) Primary key,

    Student_Name varchar(50) NOT NULL,

    Paid_Fee decimal(10,2) NOT NULL,

    Due_Fee decimal(10,2) NOT NULL,

    Total_Fee decimal(10,2) NOT NULL,

    foreign key(Student_ID) references Student(ID)
);
```

Question No. 03
Write the differences between data and information
Answer No. 03
Data : Data is in the form of raw material. It is Unprocessed and unorganized facts or details without any context. It can be Quantitative or Qualitative. Example: A list of numbers is data. **Information :** Information is processed and organized data that has been given meaning through relational connection and Interpretation. It is data made useful and relevant Example: If those Numbers are used to represent the ages of a group of people then it becomes information.

Question No. 04
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. (If you followed the class, you should know this). Answer the following questions 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

Answer No. 04

Update and Delete query is not executing because the safe mode is on, for executing the update and delete query we have to turn off the safe mode then execute the query and then turn on the safe mode.

UPDATE:

```
SET SQL_SAFE_UPDATES = 0;

UPDATE Employee

SET Department = 'Engineering'

where EmployeeID = 1;

SET SQL_SAFE_UPDATES = 1;
```

Delete :

```
SET SQL_SAFE_UPDATES = 0;

DELETE FROM Employee

where EmployeeID =1;
```

```
SET SQL_SAFE_UPDATES = 1;
```

Question No. 05
Write a query to show the distinct department names
Answer No. 05
Select distinct Department FROM Employee;

Question No. 06
Write a query to show the LastNames of the employees sorted by descending ages
Answer No. 06
SELECT LastName From Employee Order BY Age DESC;

Question No. 07
Write a query to show the employee LastName whose age is greater than 30 and works in Marketing department.
Answer No. 07
Select LastName From Employee Where Age>30 AND Department='Marketing';

Question No. 08
Write a query to select all the employees
Answer No. 08

```
Select * From Employee;
```

Question No. 09
Write a query to get employees whose names includes ‘son’
Answer No. 09
Select * From Employee Where LastName Like '%son';

Question No. 10
Write a query to get the engineers
Answer No. 10
Select * From Employee Where Department='Engineering';