

Assignment-1 Solution

1 And 2):

```
CREATE TABLE Student
(
    Roll CHAR(6),
    Name VARCHAR(60) NOT NULL,
    Email VARCHAR(60),
    Address VARCHAR(255),
    Age INT,
    Constraint pk_roll PRIMARY KEY(Roll),
    Constraint unique_mail UNIQUE(Email),
    Constraint check_age CHECK(Age > 16)
);
```

```
CREATE TABLE Library
(
    BookName VARCHAR(60) PRIMARY KEY,
    Hired_Roll CHAR(6),
    FOREIGN KEY (Hired_Roll) REFERENCES Student(Roll)
);
```

```
CREATE TABLE Fees
(
    ID VARCHAR(50) PRIMARY KEY,
    Bal_ID CHAR(6),
    Balance DOUBLE NOT NULL,
    FOREIGN KEY (Bal_ID) REFERENCES Student(Roll)
);
```

3)

Data	Information
Raw and unprocessed facts.	Processed, organized, and meaningful data.
Does not depend on information.	Depends on data.
Example: I, 20, Have, Pens.	I have 20 pens.

4) In MySQL doesn't permitted DELETE/UPDATE. Because safe mode is on, when we face this problem then we write this code "SET SQL_SAFE_UPDATES = 0;" to solve this.

5)

```
SELECT DISTINCT Department
FROM Employee;
```

6)

```
SELECT LastName  
FROM Employee  
ORDER BY Age DESC;
```

7)

```
SELECT LastName  
FROM Employee  
WHERE Age > 30 AND Department = 'Marketing';
```

8)

```
SELECT *  
FROM Employee;
```

9)

```
SELECT *  
FROM Employee  
WHERE FastName LIKE '%son%' OR LastName LIKE '%son%';
```

10)

```
SELECT *  
FROM Employee  
WHERE Department = 'Marketing';
```