1. What is database?

A database is a systematic collection of data. Databases support storage and manipulation of data. Databases make data management easy.

1. What is table?

Tables can be created using CREATE TABLE statement and it actually has the following syntax.

CREATE TABLE [IF NOT EXISTS] `TableName` (`fieldname` dataType [optional parameters]) ENGINE = storage Engine;

1. What is column?

a column is a set of data values of a particular simple type, one for each row of the table. The columns provide the structure according to which the rows are composed. Columns contain the column name, data type, and any other attributes for the column

Here is the format of a simple select statement:

select "column1"

from "tablename";

1. What is row?

Rows contain the records or data for the columns.

1. Example for inner join?

Select \*from invoice;

* Select invoice id,invoice date

From invoice

Inner join invoice line

On invoice line.invoice id=invoice.invoice id

1. Example for left outer join?

The LEFT JOIN returns all the rows from the table on the left even if no matching rows have been found in the table on the right. Where no matches have been found in the table on the right, NULL is returned.

SELECT A.`title` , B.`first\_name` , B.`last\_name`

FROM `movies` AS A

LEFT JOIN `members` AS B

ON B.`movie\_id` = A.`id`

1. Right outer join?

he RIGHT JOIN returns all the columns from the table on the right even if no matching rows have been found in the table on the left. Where no matches have been found in the table on the left, NULL is returned.

SELECT A.`first\_name` , A.`last\_name` , B.`title`

FROM `members` AS A

RIGHT JOIN `movies` AS B

ON B.`id` = A.`movie\_id`

1. Example for max,sum,avg?

SELECT SUM(Total) FROM Orders

WHERE OrderDate BETWEEN ‘3/1'2014' AND ‘3/31/2014'

SELECT AVG(Total) FROM Orders

WHERE OrderDate BETWEEN ‘3/1'2014' AND ‘3/31/2014'

SELECT MAX(Total) FROM Order

WHERE OrderDate BETWEEN ‘3/1'2014' AND ‘3/31/2014'

1. Example for group by?

SELECT column\_name, aggregate\_function(column\_name)

FROM table\_name

WHERE column\_name operator value

GROUP BY column\_name;

1. Example for having?

SELECT column\_name, aggregate\_function(column\_name)

FROM table\_name

WHERE column\_name operator value

GROUP BY column\_name

HAVING aggregate\_function(column\_name) operator value;

1. Example for where condition?

SELECT column\_name,column\_name

FROM table\_name

WHERE column\_name operator value;

1. Example for primary key?

CREATE TABLE Persons

(

P\_Id int NOT NULL,

LastName varchar(255) NOT NULL,

FirstName varchar(255),

Address varchar(255),

City varchar(255),

PRIMARY KEY (P\_Id)

)

1. Example for foreign key?

CREATE TABLE Orders

(

O\_Id int NOT NULL,

OrderNo int NOT NULL,

P\_Id int,

PRIMARY KEY (O\_Id),

FOREIGN KEY (P\_Id) REFERENCES Persons(P\_Id)

)