

Part1

1

Create a new schema named "SQL_Basics_Practice"

Ans:

```
Create Schema SQL_Basics_Practice;
```

2

Create a table in this new schema named "sales" using SQL "Create" command. It should have all the columns as per "Data_Sales" sheet. Make OrderId as primary key

Ans:

```
use sql_basics_practice;
CREATE TABLE sales (
  `Order ID` INTEGER not null unique,
  `Order Date` DATETIME,
  `Customer ID` INTEGER,
  `Customer Name` VARCHAR(9),
  `Sales Person` VARCHAR(12),
  `Region` VARCHAR(10),
  `Product_Type` VARCHAR(9),
  `Price` INTEGER,
  `Quantity` INTEGER,
  primary key (`Order ID`)
);
```

3

Insert 5 records into this table using INSERT operation

Ans:

```
INSERT INTO sales
  (`Order ID`, `Order Date`, `Customer ID`, `Customer Name`, `Sales Person`,
  `Region`, `Product_Type`, `Price`, `Quantity`)
VALUES
  (0009, '2021-05-01', '20', 'Company T', 'Andrew James', 'Arizona', 'Product 1',
  399, 5),
  (0012, '2021-05-01', '6', 'Company F', 'Laura Larsen', 'California', 'Product 1',
  399, 6),
  (0014, '2021-05-01', '4', 'Company D', 'Anna Weber', 'Texas', 'Product 1', 399,
  4),
  (0020, '2021-07-01', '5', 'Company E', 'Anna Weber', 'Texas', 'Product 1', 399,
  3),
  (0024, '2021-07-01', '12', 'Company L', 'Michael Fox', 'New Mexico', 'Product 1',
  399, 2);
```

4

SELECT all columns of the table sorted by order date first to last and then by quantity highest to lowest

Ans:

```
Select * from sql_basics_practice.sales order by 'order date' asc, quantity desc;
```

5

Create a new table named "sales_bkp" from the existing "sales" table copying all rows & columns

Ans:

```
Create table sales_bkp (select * from sales);
```

6

Delete the first row from sales_bkp

Ans:

first not able to delete first row as there is not primary key for sales_bkp table
After adding primary key to order id

```
Alter table sales_bkp add Primary key(`Order ID`);
```

```
Delete from sales_bkp where 'Order ID' = 9;
```

7

Add a new column named "CreatedBy" that has default value of your name

Ans:

```
Alter Table sales_bkp add column `Created By` NVARCHAR(20) default 'Pavan';
```

8

```
SELECT ORDERID, CREATEDBY, SALESPERSON and PRICE from sales_bkp.
```

Ans:

```
select `Order ID`, `Sales Person`, `Created By`, `Price` from sales_bkp;
```

9

Remove "CreatedBy" column from sales_bkp

Ans:

```
Alter table sales_bkp drop column `Created By`;
```

10

Remove sales_bkp table from the schema

Ans:

```
Truncate table SQL_Basics_Practice.sales_bkp; // Deleting all rows
```

```
Drop table SQL_Basics_Practice.sales_bkp; // Deleting table from schema
```

Part2

1

Create a new table "sales_data" using data table import functionality. Import the "data_sales" sheet into this table.

Ans:

Table Data Import Wizard

2

Inspect this table "sales_data" especially its columns data types and the SQL that generated this table

Ans:

Describe data_sales;

3

SELECT all columns of this table

Ans:

select * from sql_basics_practice.data_sales;

4

SELECT all columns of this table only for the State of California

Ans:

select * from sql_basics_practice.data_sales where region = 'California';

5

Find the "Minimum", "Maximum", Average and Total values for Price and Quantity

Ans:

select max(quantity),min(quantity),max(price),min(price),avg(quantity),avg(price),
sum(Quantity),sum(Price) from sql_basics_practice.data_sales;

6

Count the number of orders occurring for each Product

Ans:

select product_type ,Count(*) from sql_basics_practice.data_sales group by
product_type;

7

Create a "Revenue" column which is product of Price and Quantity

Ans:

Alter table sql_basics_practice.data_sales add column Revenue double default
(Quantity*price);

select Revenue from sql_basics_practice.data_sales;

8

Calculate the total revenue for each sales person

Ans:

select `Sales Person`, sum(Revenue) from sql_basics_practice.data_sales group
by `Sales Person` order by sum(Revenue) desc ;

9

Get the list of orders for which revenue is between 1000 and 3000, for the state of

TEXAS

Ans:

```
select * from sql_basics_practice.data_sales where region = 'Texas' and revenue  
between 1000 and 3000 order by revenue desc ;
```

10

Get the list of Sales Person where total revenue is greater than 250000

Ans:

```
select `Sales Person`, sum(Revenue) from sql_basics_practice.data_sales group by  
`Sales Person` having sum(Revenue) > 250000 ;
```