SQL Practice Project -1 submitted by Sujit Sonar:

Retail Mart Management.

DESCRIPTION
A data analyst of a retail shop, Happy Mart, wants to store the product details, the customer details, and the order details to provide unparalleled insights about customer behavior and product stock details daily.
Objective:
The design of the database helps to easily evaluate and identify the performance of the shop to increase the daily sales.

Task to be performed:

- Write a query to create a database named **SQL basics**.

  Create database if not exists SQL_basics;

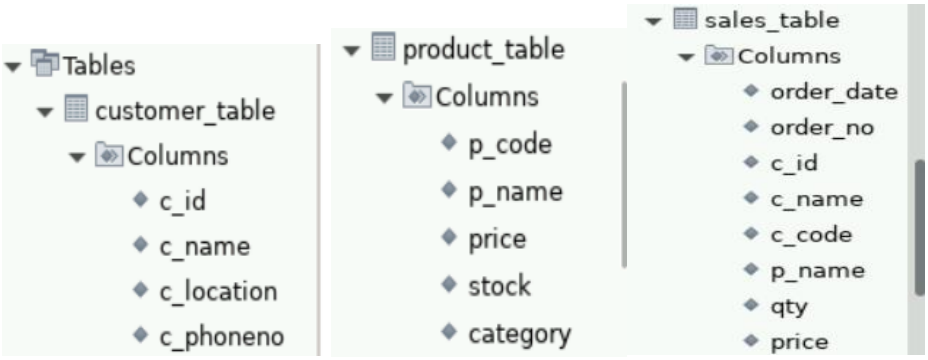
- Write a query to select the database **SQL basics**.
  use SQL_basics;

- Write a query to create a **product table** with fields as product code, product name, price, stock and category, **customer table** with the fields as customer id, customer name, customer location, and customer phone number and, **sales table** with the fields as date, order number, product code, product name, quantity, and price.

Customer Table:
create table customer_table(
c_id int not nul primary key,
c_name varchar(225),
c_location varchar(225),
c_phoneno varchar(225);

Product Table:
create table product_table(
p_code int not null primary key,
p_name varchar(225),
price double;
stock int,
category varchar(225);

Sales Table:
create table sales_table(
order_date date,
order_no varchar(225),
c_id int,
c_name varchar(225),
c_code int,
p_name varchar(225),
qty int,
price double;



- Write a query to **insert values** into the tables.

  Inserting values into product_table:

  Insert into SQL_basics.prodct_table
  (p_code, p_name, price, stock, category)
  Values
  (1,'tulip',198,5,'perfume')
  (2,'cornoto',50,21,'icecream')
  (3,'Pen',10,52,'Stationary')
  (4,'Lays',10,20,'snacks')
  (5,'mayanoise',90,10,'dip')
  (6,'jam',105,10,'spread')
  (7,'shampoo',5,90,'hair product')
  (8,'axe',210,4,'perfume')
  (9,'park avenue',901,2,'perfume')
  (10,'wattagirl',201,3,'perfume')
  (11,'pencil',4,10,'Stationary')
  (12,'sharpener',5,90,'Stationary')
  (13,'sketch pen',30,10,'Stationary')
  (14,'tape',15,30,'Stationary')
  (15,'paint',60,12,'Stationary')
  (16,'chocolate',25,50,'snacks')
  (17,'biscuts',60,26,'snacks')
  (18,'mango',100,21,'fruits')
  (19,'apple',120,9,'fruits')
  (20,'kiwi',140,4,'fruits')
  (21,'carrot',35,12,'vegetable')
  (22,'onion',22,38,'vegetable')
  (23,'tomato',21,15,'vegetable')
  (24,'serum',90,4,'hair product')
  (25,'conditioner',200,5,'hair product')
  (26,'oil bottle',40,2,'kitchen utensil');

#	p_code	p_name	price	stock	category
1	1	tulip	198	5	prfume
2	2	cornoto	50	21	icecream
3	3	Pen	10	52	Stationary
4	4	Lays	10	20	snacks
5	5	mayanoise	90	10	dip
6	6	jam	105	10	spread

Inserting values into customer_table:

```
Insert into table SQL_basics.customer_table
(c_id  int, c_name , c_location , c_phoneno)
Values
(1111,'Nisha',kerala,'8392320')
(1212,'Oliver',kerala,'4353891')
(1216,'Nila',delhi,'3323242')
(1246,'Vignesh',chennai,'1111212')
(1313,'shiny',Maharastra,'5454543')
(1910,'Mohan',mumbai,'9023941')
(2123,'Biyush',Bombay,'1253358')
(3452,'Alexander',West Bengal,'1212134')
(3921,'Mukesh',Manipur,'4232321')
(5334,'Christy',pakistan,'2311111')
(9021,'Rithika',Kashmir,'1121344')
(9212,'Jessica',banglore,'1233435')
(9875,'Stephen',chennai,'1212133');
```

Result Grid | Filter Rows: | Edit:

#	c_id	c_name	c_location	c_phonenc
1	1111	Nisha	kerala	8392320
2	1212	Oliver	kerala	4353891
3	1216	Nila	delhi	3323242
4	1246	Vignesh	chennai	1111212
5	1313	shiny	Maharastra	5454543
6	1910	Mohan	mumbai	9023941

Inserting values into sales_table:

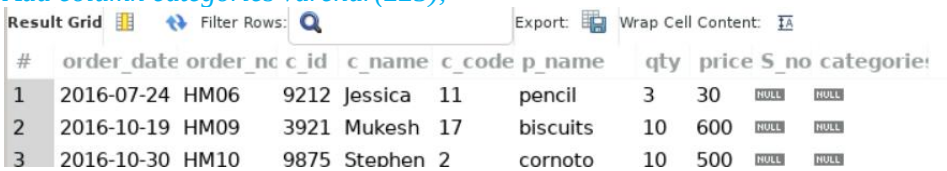
```
Insert into SQL_basics.sales_table
(order_date, order_no, c_id, c_name , c_code, p_name, qty, price)
Values
('2016-24-07','HM06',9212,'Jessica',11,'pencil',3,30)
('2016-19-10','HM09',3921,'Mukesh',17,'biscuits',10,600)
('2016-30-10','HM10',9875,'Stephen',2,'cornoto',10,500)
('2018-12-04','HM03',1212,'Oliver',20,'kiwi',3,420)
('2018-02-05','HM05',1910,'Mohan',20,'kiwi',2,280)
('2018-20-09','HM08',5334,'Chirsty',16,'chocolate',2,50)
('2019-11-01','HM07',1246,'Vignesh',19,'apple',5,600)
('2019-15-03','HM01',1910,'Mohan',5,'mayanoise',4,360)
('2021-10-02','HM04',1111,'Nisha',25,'conditioner',5,1000)
('2021-12-02','HM02',2123,'Biyush',3,'Pen',2,20);
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content

#	order_date	order_nc	c_id	c_name	c_code	p_name	qty	price
1	2016-07-24	HM06	9212	Jessica	11	pencil	3	30
2	2016-10-19	HM09	3921	Mukesh	17	biscuits	10	600
3	2016-10-30	HM10	9875	Stephen	2	cornoto	10	500
4	2018-04-12	HM03	1212	Oliver	20	kiwi	3	420
5	2018-05-02	HM05	1910	Mohan	20	kiwi	2	280
6	2018-09-20	HM08	5334	Christy	16	chocolate	2	50

- Write a query to add two new columns such as **S_no** and **categories** to the sales table.

Alter table SQL_basics.sales_table
Add column S_no int,
Add column categories varchar(225);



#	order_date	order_nc	c_id	c_name	c_code	p_name	qty	price	S_no	categorie
1	2016-07-24	HM06	9212	Jessica	11	pencil	3	30	NULL	NULL
2	2016-10-19	HM09	3921	Mukesh	17	biscuits	10	600	NULL	NULL
3	2016-10-30	HM10	9875	Stephen	2	cornoto	10	500	NULL	NULL

- Write a query to change the column type of **stock** in the product table to **varchar**.

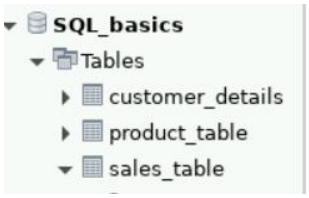
#	Field	Type	Null	Key	Default	Extra
1	p_code	int	NO	PRI	NULL	
2	p_name	varchar(255)	YES		NULL	
3	price	double	YES		NULL	
4	stock	int	YES		NULL	
5	category	varchar(255)	YES		NULL	

alter table SQL_basics.product_table
change column stock stock varchar(225);

#	Field	Type	Null	Key	Default
1	p_code	int	NO	PRI	NULL
2	p_name	varchar(255)	YES		NULL
3	price	double	YES		NULL
4	stock	varchar(225)	YES		NULL
5	category	varchar(255)	YES		NULL

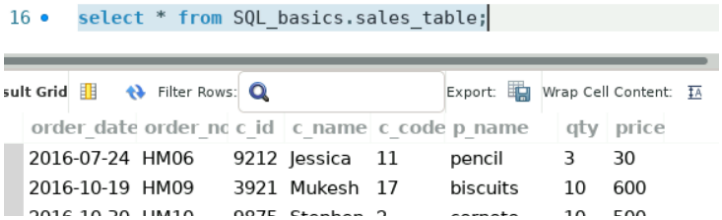
- Write a query to **change** the table name from **customer**-to-**customer** details.

alter table SQL_basics.customer_table
rename customer_details;



- Write a query to **drop** the columns **S_no** and **categories** from the sales table.

alter table SQL_basics.sales_table
drop column S_no,
drop column categories;



order_date	order_nc	c_id	c_name	c_code	p_name	qty	price
2016-07-24	HM06	9212	Jessica	11	pencil	3	30
2016-10-19	HM09	3921	Mukesh	17	biscuits	10	600

- Write a query to **display** order id, customer id, order date, price, and quantity from the sales table.

```
24 •  select order_no, c_id, order_date,price,qty from SQL_basics.sales_table;
```

sult Grid | Filter Rows: | Export: | Wrap Cell Content:

order_nc	c_id	order_date	price	qty
HM06	9212	2016-07-24	30	3
HM09	3921	2016-10-19	600	10
HM10	9875	2016-10-30	500	10
HM03	1212	2018-04-12	420	3
HM05	1910	2018-05-02	280	2

- Write a query to display all the details in the product table if the **category is stationary**.

```
27 •  select * from SQL_basics.product_table
28    where category ='Stationary';
```

Result Grid | Filter Rows: | Edit:

#	p_code	p_name	price	stock	category
1	3	Pen	10	52	Stationary
2	11	pencil	4	10	Stationary
3	12	sharpner	5	90	Stationary
4	13	sketch pen	30	10	Stationary
5	14	tape	15	30	Stationary
6	15	paint	60	12	Stationary

- Write a query to display a **unique category** from the product table.

```
27 •  select distinct category  from SQL_basics.product_table
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

#	category
1	prfume
2	icecream
3	Stationary
4	snacks
5	dip
6	spread

- Write a query to display the sales details if **quantity is greater than 2** and **price is lesser than 500** from the sales table.

```
24 •  select * from SQL_basics.sales_table
25    where qty >2 and price < 500;
```

esult Grid | Filter Rows: | Export: | Wrap Cell Content:

#	order_date	order_nc	c_id	c_name	c_code	p_name	qty	price
1	2016-07-24	HM06	9212	Jessica	11	pencil	3	30
2	2018-04-12	HM03	1212	Oliver	20	kiwi	3	420
3	2019-03-15	HM01	1910	Mohan	5	mayanoise	4	360

- Write a query to display the customer's name if the **name ends with a**.

```
select c_name from SQL_basics.customer_details
where c_name like '%a';
```

c_name
Nisha
Nila
Ritika
Jessica

- Write a query to display the product details in **descending order** of the **price**.

```
select * from SQL_basics.product_table
order by price desc;
```

p_code	p_name	price	stock	category
9	park avenue	901	2	prfume
8	axe	210	4	prfume
10	wattagirl	201	3	prfume
25	conditioner	200	5	hair product
1	tulip	198	5	prfume
20	kiwi	140	4	fruits

- Write a query to display the product code and category from **similar categories** that are **greater than or equal to 2**.

```
select p_code,category from SQL_basics.product_table
where category in (select category from
(select category ,count(category) as cat_count from SQL_basics.product_table
group by category
having cat_count >=2)p);
```

#	p_code	category
1	1	prfume
2	3	Stationary
3	4	snacks
4	7	hair product
5	8	prfume
6	9	prfume

- Write a query to display the order number and the customer name to **combine** the results of the order and the customer tables including **duplicate rows**.

```
select c.c_name, s.order_no from SQL_basics.sales_table s
left join SQL_basics.customer_details c  on s.c_id = c.c_id
order by c.c_name;
```

c_name	order_nc
Biyush	HM02
Christy	HM08
Jessica	HM06
Mohan	HM05
Mohan	HM01
Mukesh	HM09

Result 19

########## END##########