Assignment-2

Customer	
Customer_Id	**Customer_Name**
1	John
2	Smith
3	Ricky
4	Walsh
5	Stefen
6	Fleming
7	Thomson
8	David

Product		
Product_Id	**Product_Name**	**Product_Price**
1	Television	19000
2	DVD	3600
3	Washing Machine	7600
4	Computer	35900
5	Ipod	3210
6	Panasonic Phone	2100
7	Chair	360
8	Table	490
9	Sound System	12050
10	Home Theatre	19350

Order		
Order_Id	**Customer_Id**	**Ordered_Date**
1	4	10-Jan-05
2	2	10-Feb-06
3	3	20-Mar-05
4	3	10-Mar-06
5	1	5-Apr-07
6	7	13-Dec-06
7	6	13-Mar-08
8	6	29-Nov-04
9	5	13-Jan-05
10	1	12-Dep-2007

Order_Details			
Order_Detail_Id	**Order_Id**	**Product_Id**	**Quantity**
1	1	3	1
2	1	2	3
3	2	10	2
4	3	7	10
5	3	4	2
6	3	5	4
7	4	3	1
8	5	1	2
9	5	2	1
10	6	5	1
11	7	6	1
12	8	10	2
13	8	3	1
14	9	10	3
15	10	1	1

1) Fetch **all the** Customer Details along with the product names that the customer has ordered.

```
94    select c.*,p.product_name
95    from customer c join orders o
96    on c.customer_id=o.customer_id
97    join order_details od
98    on o.order_id=od.order_id
99    join product p
100   on od.product_id=p.product_id;
```

Data Output | Messages | Notifications

	customer_id integer	customer_name character varying (50)	product_name character varying (100)
1	4	Walsh	Washing Machine
2	4	Walsh	DVD
3	2	Smith	Home Theatre
4	3	Ricky	Chair
5	3	Ricky	Computer
6	3	Ricky	Ipod
7	3	Ricky	Washing Machine
8	1	John	Television
9	1	John	DVD
10	7	Thomson	Ipod
11	6	Fleming	Panasonic Phone
12	6	Fleming	Home Theatre
13	6	Fleming	Washing Machine
14	5	Stefen	Home Theatre
15	1	John	Television

2) Fetch Order_Id, Ordered_Date, Total Price of the order (product price*qty).

```
102   2.
103   select o.order_id, o.ordered_date, sum(p.product_price*od.quantity)
104   from orders o join order_details od
105   on o.order_id=od.order_id
106   join product p on od.product_id=p.product_id
107   group by o.order_id,o.ordered_date
108   order by o.order_id asc;
```

Data Output | Messages | Notifications

	order_id [PK] integer	ordered_date date	sum numeric
1	1	2005-01-10	18400.00
2	2	2006-02-10	38700.00
3	3	2005-03-20	88240.00
4	4	2006-03-10	7600.00
5	5	2007-04-05	41600.00
6	6	2006-12-13	3210.00
7	7	2008-03-13	2100.00
8	8	2004-11-29	46300.00
9	9	2005-01-13	58050.00
10	10	2007-12-12	19000.00

3) Fetch the Customer Name, who has not placed any order

```
3.
select c.customer_name
from customer c left join orders o
on c.customer_id=o.customer_id
where o.order_id is null;
```

Data Output | Messages | Notifications

	customer_name character varying (50)
1	David

4) Fetch the Product Details without any order(purchase)

```
4.
select p.*
from product p left join order_details od
on p.product_id=od.product_id
where od.order_detail_id is null;
```

Data Output | Messages | Notifications

	product_id [PK] integer	product_name character varying (100)	product_price numeric (10,2)
1	8	Table	490.00
2	9	Sound System	12050.00

5) Fetch the Customer name along with the total Purchase Amount

```
5.
select c.*, sum(p.product_price*od.quantity)
from customer c join orders o
on c.customer_id=o.customer_id
join order_details od on o.order_id=od.order_id
join product p on od.product_id=p.product_id
group by c.customer_id;
```

Data Output | Messages | Notifications

	customer_id [PK] integer	customer_name character varying (50)	sum numeric
1	4	Walsh	18400.00
2	6	Fleming	48400.00
3	2	Smith	38700.00
4	3	Ricky	95840.00
5	5	Stefen	58050.00
6	7	Thomson	3210.00
7	1	John	60600.00

6) Fetch the Customer details, who has placed the first and last order

```
130  6.
131  select * from customer
132  where customer_id in (select customer_id from orders
133      where ordered_date = (select max(ordered_date) from orders)
134      or ordered_date = (select min(ordered_date) from orders));
```

Data Output | Messages | Notifications

	customer_id [PK] integer	customer_name character varying (50)
1	6	Fleming

7) Fetch the customer details , who has placed more number of orders

```
136  7.
137  select c.*, count(o.order_id) from customer c
138  join orders o on c.customer_id=o.customer_id
139  group by c.customer_id
140  having count(o.order_id)=
141      (select max(count_order)
142      from(select count(order_id) as count_order
143      from orders group by customer_id)t);
```

Data Output | Messages | Notifications

	customer_id [PK] integer	customer_name character varying (50)	count bigint
1	6	Fleming	2
2	3	Ricky	2
3	1	John	2

8) Fetch the customer details, who has placed multiple orders in the same year

```
145  8.
146  select c.* from customer c
147  join orders o on c.customer_id=o.customer_id
148  group by c.customer_id, extract(year from o.ordered_date)
149  having count(o.order_id)>1;
```

Data Output | Messages | Notifications

	customer_id [PK] integer	customer_name character varying (50)
1	1	John

9) Fetch the name of the month, in which more number of orders has been placed

```
151  9.
152  select to_char(ordered_date,'month') month_name
153  from orders
154  group by to_char(ordered_date,'month')
155  order by count(*) desc limit 1;
```

Data Output | Messages | Notifications

	month_name text
1	march

10) Fetch the maximum priced **Ordered Product**

```
157  10.
158  select p.product_id,p.product_name, p.product_price
159  from product p join order_details od
160  on p.product_id=od.product_id
161  where p.product_price=
162      (select max(product_price) from product
163      where product_id in
164      (select product_id from order_details));
```

Data Output | Messages | Notifications

	product_id [PK] integer	product_name character varying (100)	product_price numeric (10,2)
1	4	Computer	35900.00