SQL Assignment 2

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

```
select c.*, p.Product_Name 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 p.Product_Id = od.Product_Id
order by c.Customer_Id
```

Output

Customer_Id	Customer_Name	Product_Name
1	John	Television
1	John	DVD
1	John	Television
2	Smith	Home Theatre
3	Ricky	Chair
3	Ricky	Computer
3	Ricky	Ipod
3	Ricky	Washing Machine

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

```
select o.Order_Id,o.Ordered_Date, sum(p.Product_Price * od.Quantity) as
total_price
from Product p
join Order_Details od
on p.Product_Id=od.Product_Id
join Orders o
on o.Order_Id=od.Order_Id
group by o.Order_Id,o.Ordered_Date
```

Output

Order_Id	Ordered_Date	total_price
1	2005-01-10	18400
2	2006-02-10	38700
3	2005-03-20	88240
4	2006-03-10	7600
5	2007-04-05	41600
6	2006-12-13	3210
7	2008-03-13	2100
8	2004-11-29	46300

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

```sql
select c.Customer_Name from Customer c
left join Orders o
on c.Customer_Id=o.Customer_Id
where o.Customer_Id is null;
```

Output

Customer_Name
David

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

```sql
select Product_Id,Product_Name from Product
where Product_Id not in(select Product_Id from Order_Details)
```

Output

Product_Id	Product_Name
8	Table
9	Sound System

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

```sql
select c.Customer_Name, sum(p.Product_Price*Quantity) from Customer c
join Product p
on c.Customer_Id=o.Customer_Id
join Order_Details od
on p.Product_Id=od.Product_Id
join Orders o
on od.Order_Id=o.Order_Id
group by c.Customer_Name
order by c.Customer_Name;
```

Output

Customer_Name	sum(p.Product_Price*Quantity)
Fleming	48400
John	60600
Ricky	95840
Smith	38700
Stefen	58050
Thomson	3210
Walsh	18400

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

```sql
select c.* from Customer c
join Orders o
on c.Customer_Id=o.Customer_Id
where o.Ordered_Date =(select max(Ordered_Date)from Orders)
or o.Ordered_Date=(select min(Ordered_Date)from Orders)
```

Output

Customer_Id	Customer_Name
6	Fleming
6	Fleming

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

```sql
select c.*, count(c.Customer_Id) from Customer c
join Orders o
on c.Customer_Id=o.Customer_Id
group by o.Customer_Id
limit 1
```

Output

Customer_Id	Customer_Name	count(c.Customer_Id)
1	John	2

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

```sql
select c.Customer_Id, c.Customer_Name, count(*) as total_order from Customer c
join Orders o
on c.Customer_Id=o.Customer_Id
group by c.Customer_Id,c.Customer_Name,strftime('%Y', o.Ordered_Date)
having count(o.Order_Id) > 1;
```

Output

Customer_Id	Customer_Name	total_order
1	John	2

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

```sql
select case strftime('%m', ordered_date)
        when '01' then 'january'
        when '02' then 'february'
        when '03' then 'march'
        when '04' then 'april'
        when '05' then 'may'
        when '06' then 'june'
        when '07' then 'july'
        when '08' then 'august'
        when '09' then 'september'
        when '10' then 'october'
        when '11' then 'november'
        when '12' then 'december'
    end as month_name from orders
group by strftime('%m', ordered_date)
order by count(*) desc limit 1;
```

Output

month_name
march

10) Fetch the maximum priced Ordered Product

```sql
select Product_Name, Product_Price from Product
where Product_Price = (select max(Product_Price) from Product);
```

Output

Product_Name	Product_Price
Computer	35900