ASSIGNMENT

Customer				
Customer_Id Customer_Na				
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_ld	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		

-creating a customer table-

create table Cust Table(

Cid integer primary key, CName text not null);

-creating product table-

create table Product Table(

Pid integer primary key, PName text not null, Product_price integer not null);

-creating order table-

create table Order Table(

Oid integer primary key, Cid integer, Ordered_date date not null, foreign key(Cid)references Cust Table(Cid));

--- creating order details table-

create table Order Details(

Orderdetails id integer primary key, Oid integer, Pid integer,

Quantity integer not null,

foreign key(Oid)references Order_Table(Oid),

foreign key(Pid)references Product Table(Pid));

-inserting values into customer table-

insert into Cust Table values(1,'John');

insert into Cust Table values(2,'Smith');

insert into Cust Table values(3,'Ricky');

insert into Cust_Table values(4,'Walsh');

insert into Cust Table values(5,'Stefen');

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insert into Cust Table values(6,'Fleming');
insert into Cust Table values(7,'Thomson');
insert into Cust Table values(8,'David');
-inserting values into product table-
insert into Product Table values(1, 'Television', 19000);
insert into Product Table values(2,'DVD',3600);
insert into Product Table values(3,'Wasing Machine',7600);
insert into Product Table values(4,'Computer',35900);
insert into Product Table values(5,'Ipod',3210);
insert into Product Table values(6, 'Panasonic Phone', 2100);
insert into Product Table values(7,'Chair',360);
insert into Product Table values(8, 'Table', 490);
insert into Product Table values(9, Sound System', 120500);
insert into Product Table values(10, 'Home Theatre', 19350);
-inserting values into order table-
insert into Order Table values(1,4, 2005-01-05);
insert into Order Table values(2,2,2006-02-10);
insert into Order Table values(3,3,2005-03-20);
insert into Order Table values(4,3,2006-03-10);
insert into Order Table values(5,1,2007-04-05);
insert into Order Table values(6,7,2006-12-13);
insert into Order Table values(7,6,2008-03-13);
insert into Order Table values(8,6,2004-11-29);
insert into Order Table values(9,5,2005-01-13);
insert into Order Table values(10,1,2007-12-12);
-inserting values into order details table-
insert into Order Details values(1,1,3,1);
insert into Order Details values(2,1,2,3);
insert into Order Details values(3,2,10,10);
insert into Order Details values(4,3,7,10);
insert into Order Details values(5,3,4,2);
insert into Order Details values(6,3,5,4);
insert into Order Details values(7,4,3,1);
insert into Order Details values(8,5,1,2);
insert into Order Details values(9,5,2,1);
insert into Order Details values(10,6,5,1);
insert into Order Details values(12,8,10,2);
insert into Order Details values(13,8,3,1);
insert into Order Details values(14,9,10,3);
insert into Order Details values(15,10,1,1);
```

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

SELECT ct.CName,pt.PName
FROM Cust_Table ct
INNER JOIN Order_Table ot ON ct.Cid=ot.Cid
INNER JOIN Order_Details od ON ot.Oid=od.Oid
INNER JOIN Product_Table pt ON od.Pid=pt.Pid;

2)Fetch Order Id, Ordered Date, Total Price of the order (product price*qty).

SELECT ot.Oid, ot.Ordered_date, (pt.Product_price*od.Quantity) AS Total_Price FROM Order_Table ot INNER JOIN Order_Details od ON ot.Oid=od.Oid INNER JOIN Product Table pt ON od.Pid=pt.Pid;

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

SELECT ct.CName FROM Cust_Table ct LEFT JOIN Order_Table ot ON ct.Cid=ot.Cid WHERE ot.Cid IS NULL;

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

SELECT pt.PName
FROM Product_Table pt
LEFT JOIN Order_Details od ON pt.Pid=od.Pid
WHERE od.Pid IS NULL;

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

SELECT ct.CName, SUM(pt.Product_price*od.Quantity) AS Total_Purchase FROM Cust_Table ct
INNER JOIN Order_Table ot ON ct.Cid=ot.Cid
INNER JOIN Order_Details od ON ot.Oid=od.Oid
INNER JOIN Product_Table pt ON od.Pid=pt.Pid
GROUP BY ct.CName;

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

SELECT ct.CName, ot.Oid, ot.Ordered_date FROM Cust Table ct

INNER JOIN Order_Table ot ON ct.Cid=ot.Cid
WHERE ot.Oid IN (SELECT MIN(Oid) FROM Order_Table)
OR ot.Oid IN (SELECT MAX(Oid)
FROM Order Table);

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

SELECT ct.CName, COUNT(ot.Oid) AS Number_of_Orders FROM Cust_Table ct
INNER JOIN Order_Table ot ON ct.Cid=ot.Cid
GROUP BY ct.CName
ORDER BY Number_of_Orders DESC
LIMIT 1;

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

SELECT ct.CName, ot.Ordered_date
FROM Cust_Table ct
INNER JOIN Order_Table ot ON ct.Cid=ot.Cid
GROUP BY ct.CName, YEAR(ot.Ordered_date)
HAVING COUNT(*) > 1;

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

SELECT MONTHNAME(ot.Ordered_date) AS Month, COUNT(*) AS Number_of_Orders FROM Order_Table ot GROUP BY MONTHNAME(ot.Ordered_date)
ORDER BY Number_of_Orders DESC
LIMIT 1;

10)Fetch the maximum priced Ordered Product

SELECT pt.PName
FROM Product_Table pt
INNER JOIN Order_Details od ON pt.Pid=od.Pid
GROUP BY pt.PName
ORDER BY pt.Product_price DESC
LIMIT 1;