# SQL SOLUTION

1)

SELECT customer.cust\_name AS "Customer", customer.grade AS "Grade",orders.ord\_no AS "Order No."

FROM orders, salesman, customer WHERE orders.customer\_id=customer.custemor\_id

AND orders.salesman\_id=salesman.salesman\_id

AND salesman.city IS NOT NULL

AND customer.grade IS NOT NULL;

2)

SELECT ord\_no, purch\_amt, ord\_date, salesman\_id FROM orders

WHERE salesman\_id IN( SELECT salesman\_id FROM salesman WHERE commision = (SELECT MAX(commision) FROM salesman));

3)

SELECT ord\_no, purch\_amt, ord\_date, salesman\_id FROM orders WHERE salesman\_id IN

(SELECT salesman\_id

FROM salesman

WHERE city='nagpur');

4)

SELECT ord\_date, SUM(purch\_amt), SUM(purch\_amt)\*.15 FROM orders

GROUP BY ord\_date

ORDER BY ord\_date ASC;

5)

SELECT ord\_no, purch\_amt, ord\_date, salesman\_id FROM orders WHERE purch\_amt >(SELECT AVG(purch\_amt) FROM orders );

6)

select \* from orders ORDER BY purch\_amt desc limit 4,1;

7)

Entities : An entity is a real-world object.

The course entity can have attributes such as course\_code and course\_name. It can have attributes such as id, name and speciality.

Relationships : A relationship signifies an association among the entities. There are three types of relationships that can exist between the entities. They are the binary, recursive and the ternary relationship.

8)

Select Customer\_id , ba.Account\_Number,

Case when ifnull(Balance\_amount,0) = 0 then Transaction\_amount else Balance\_amount end as Balance\_amount

from bank\_account\_details ba inner join bank\_account\_transaction bat on ba.Account\_Number = bat.Account\_Number and Account\_type = "Credit Card";

9)

Select ba.Customer\_id, ba.Account\_Number, Balance\_amount, Transaction\_amount, Transaction\_Date

from bank\_account\_details ba inner join bank\_account\_transaction bat on ba.Account\_Number = bat.Account\_Number

And

( Transaction\_Date between "2020-03-01" and "2020-04-30");

10)

Select ba.Customer\_id, ba.Account\_Number, Balance\_amount, Transaction\_amount, Transaction\_Date

from bank\_account\_details ba Left join bank\_account\_transaction bat on ba.Account\_Number = bat.Account\_Number

And NOT

(Transaction\_Date between "2020-03-01" and "2020-03-31");