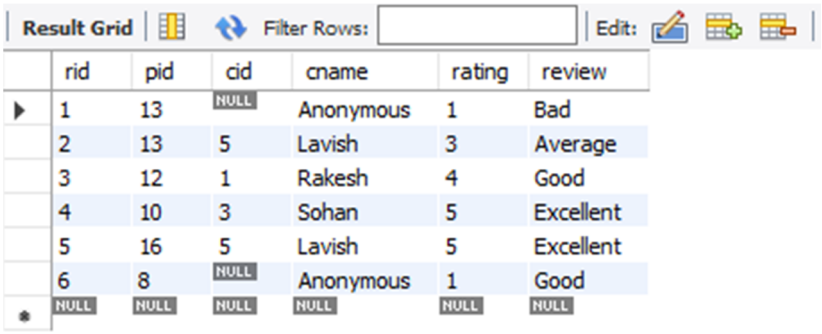
Problem-1

```
create table book(
    book_id int not null auto_increment,
    book_p_id int not null,
    book_c_id int not null default 1,
    book_author varchar(100) not null,
    book_publ_date date not null,
    primary key (book_id),
    foreign key (book_p_id) references  prod_details(p_id) on delete cascade,
    foreign key (book_c_id) references  category(cat_id) on delete cascade
);

insert into book (book_p_id, book_author, book_publ_date)
values
        (1, 'Franz Kafka', '2007-01-01');

insert into book (book_p_id, book_author, book_publ_date)
values
        (2, 'Franz Kafka', '2017-11-01'),
        (3, 'Jaya Dev', '2018-11-01'),
        (4, 'Jayaprakash Narayan', '1997-11-01'),
        (5, 'G. B. Shaw', '2000-11-01');
```

Problem-2

```
delete from customer where cust_id = 6;
update review
set
    cname = 'Anonymous'
where cid is null and cname is not null;
```

Note: **on delete set default is not supporting on my current db so I used this method.**



rid	pid	cid	cname	rating	review
1	13	NULL	Anonymous	1	Bad
2	13	5	Lavish	3	Average
3	12	1	Rakesh	4	Good
4	10	3	Sohan	5	Excellent
5	16	5	Lavish	5	Excellent
6	8	NULL	Anonymous	1	Good
NULL	NULL	NULL	NULL	NULL	NULL

Problem-3

```
UPDATE prod_details
SET
    p_price = (p_price * 0.9)
WHERE
    p_vw_count < 10 AND p_price > 5000 AND TIMESTAMPDIFF(MONTH, p_vw_date, CURDATE()) < 3;
```

Problem-4

```
insert into cust_address (cust_id, city, state)
values
(1, 'Mumbai', 'Maharashtra'),
(1, 'Pune', 'Maharashtra');
```

Problem-5

```
select ret_name as 'Name', ret_email as 'Email-id' from retailer where ret_city = 'Delhi';
```

Problem - 6

```
select cust_name as 'Name', sum(TotalPurchase) as 'Total Amount' from customer natural join cust_address,
        (select ord_cust_id, sum(ord_prd_qunt*p_price) as 'TotalPurchase'
        from orders natural join ord_details, prod_details
        where ord_prd_id = p_id
        group by ord_id
        having sum(ord_prd_qunt*p_price) >= 5000 ) as P
where customer.cust_id = p.ord_cust_id and city = 'Mumbai'
group by cust_id
```

Problem-7

```
select p_name as 'Product Name', p_price as 'Product Price', b_name as 'Brand Name'
from prod_details, brand
where prod_details.p_b_id = brand.b_id and (p_name like '%Apple%' or p_name like '%Xioami%');
```

Problem-8

```
select p_name as 'Product Name', p_price as 'Product Price', p_quantity as 'Product Quantity'
from prod_details
where p_id in (
                select ord_prd_id
                from ord_details as D
                 natural join (
                        select *
                        from orders
                        where ord_cust_id = 1
                        order by ord_add_date desc
                        limit 3
                ) as O
);
```

Problem-9

```
select p_name as 'Product Name', p_price as 'Product Price', cart_prd_qunt as 'Quantity'
from prod_details,  carts natural join cart_details
where cart_cust_id = 2 and cart_prd_id = p_id
```

Problem-10

```
select p_name as 'Book Name', book_publ_date as 'Published Date'
from prod_details, book
where  prod_details.p_type = 'book' and  prod_details.p_id = book.book_p_id and TIMESTAMPDIFF(MONTH,
'2001-01-01', book_publ_date)>=0;
```

Problem-11

```
select p_name as 'Product Name', p_price as 'Product Price'
from prod_details
where p_cat_id = 2 and p_price between 10000 and 50000;
```

Probem-12

```
select p_name as 'Furniture Name'
from prod_details, retailer
where prod_details.p_cat_id = 3 and prod_details.p_vndr_id = retailer.ret_id and retailer.ret_name = 'IKea';
```

Problem-13

```
select p_name as 'Product Name', p_price as 'Product Price'
from prod_details
where p_cat_id = 2 and p_type = 'Laptop'
order by p_price asc;
```

Problem -14

```
select * from prod_details where TIMESTAMPDIFF(MONTH, '2000-07-09', p_add_dt)>=0;
```

Problem-15

```
select p_name as 'Book Name'
from prod_details, book
where  prod_details.p_type = 'book' and  prod_details.p_id = book.book_p_id and book_author='Franz Kafka';
```

Problem-16

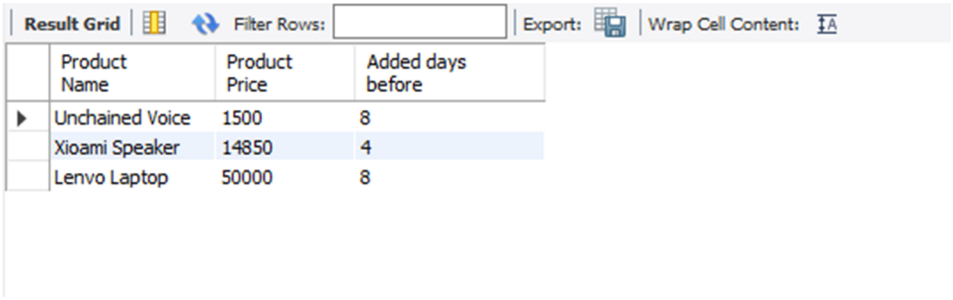
```
select cust_name as 'Name', cust_email as 'Email-id', sum(cart_prd_qunt) as 'Quantity'
from customer, carts natural join cart_details
where customer.cust_id = carts.cart_cust_id
group by cust_id
having sum(cart_prd_qunt)<3
```

Problem-17

```
select ord_id, MAX(ProductOrdered) as 'Max Ordered'
from (
                select ord_id, SUM(ord_prd_qunt) as 'ProductOrdered'
                from orders natural join ord_details
                group by ord_id
   ) as bests
```

Problem-18

```
select p_name as 'Product Name', p_price as 'Product Price', timestampdiff(day,p_add_dt,CURDATE()) as
'Added days before'
from prod_details
where timestampdiff(day,p_add_dt,CURDATE())<=10;
```



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

Product Name	Product Price	Added days before
Unchained Voice	1500	8
Xioami Speaker	14850	4
Lenvo Laptop	50000	8

Problem-19

```
select ret_name, ret_email

from retailer

where ret_id in

        (select p_vndr_id

        from orders natural join ord_details, prod_details

        where ord_cust_id = 1 and ord_prd_id = p_id);
```

Problem-20

```
insert into Diwali_Deals (p_name, p_price, p_type, p_vndr_id, p_desc, p_quantity, p_add_dt, p_vw_count, p_vw_date, p_cat_id, p_b_id)
select p_name, (p_price*.95), p_type, p_vndr_id, p_desc, p_quantity, p_add_dt, p_vw_count, p_vw_date, p_cat_id, p_b_id
from prod_details
where timestampdiff(day,p_add_dt,CURDATE())<=90;
```

Problem-21

```
select p_name as 'Product Name' , p_price as 'Product Price'
from orders natural join ord_details, prod_details, review
where ord_prd_id = p_id and ord_cust_id = 1 and p_id = review.pid and rating >=3
limit 10
```