# Brokerage Application

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**DBMS MINI PROJECT**

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## Content.

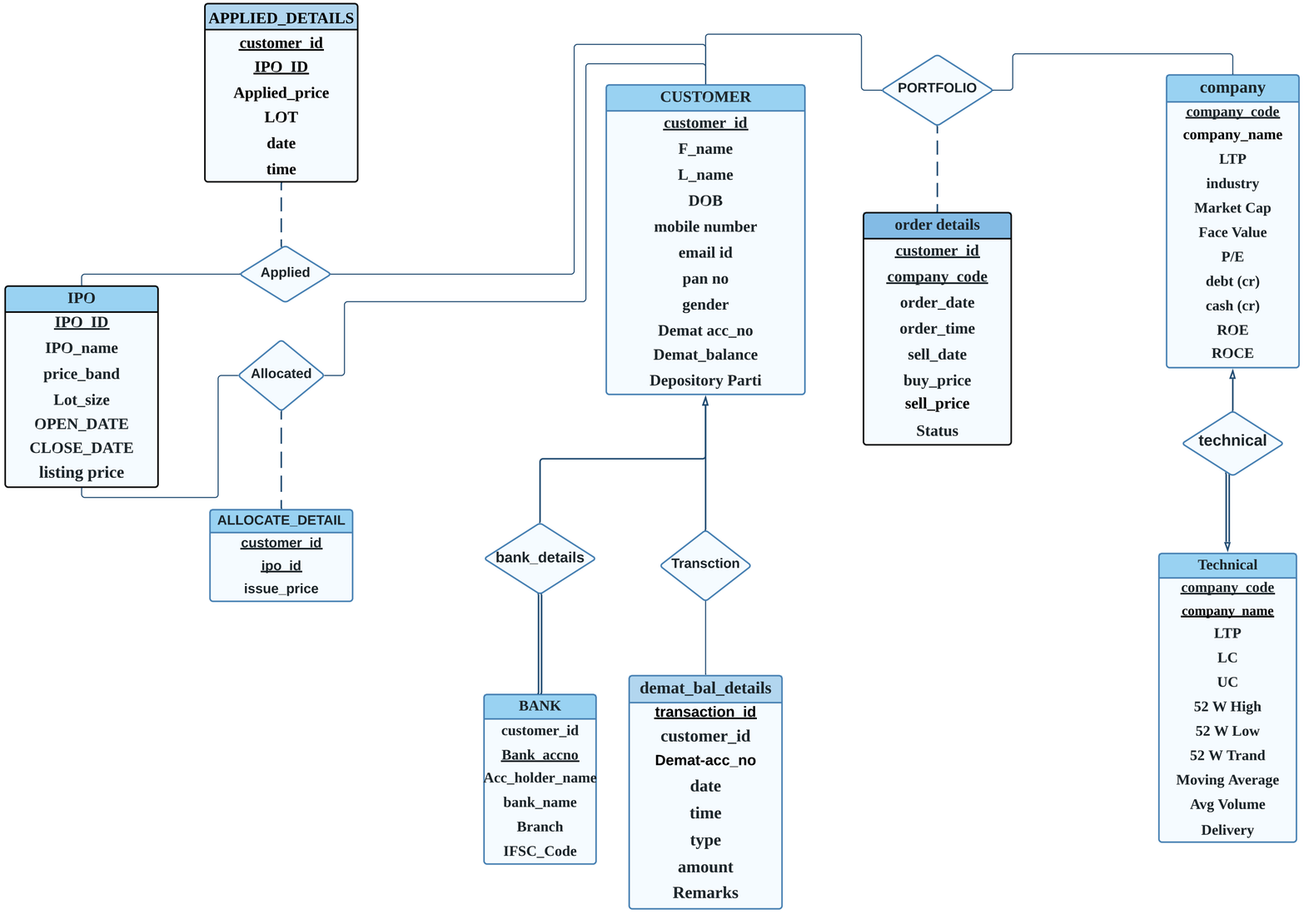


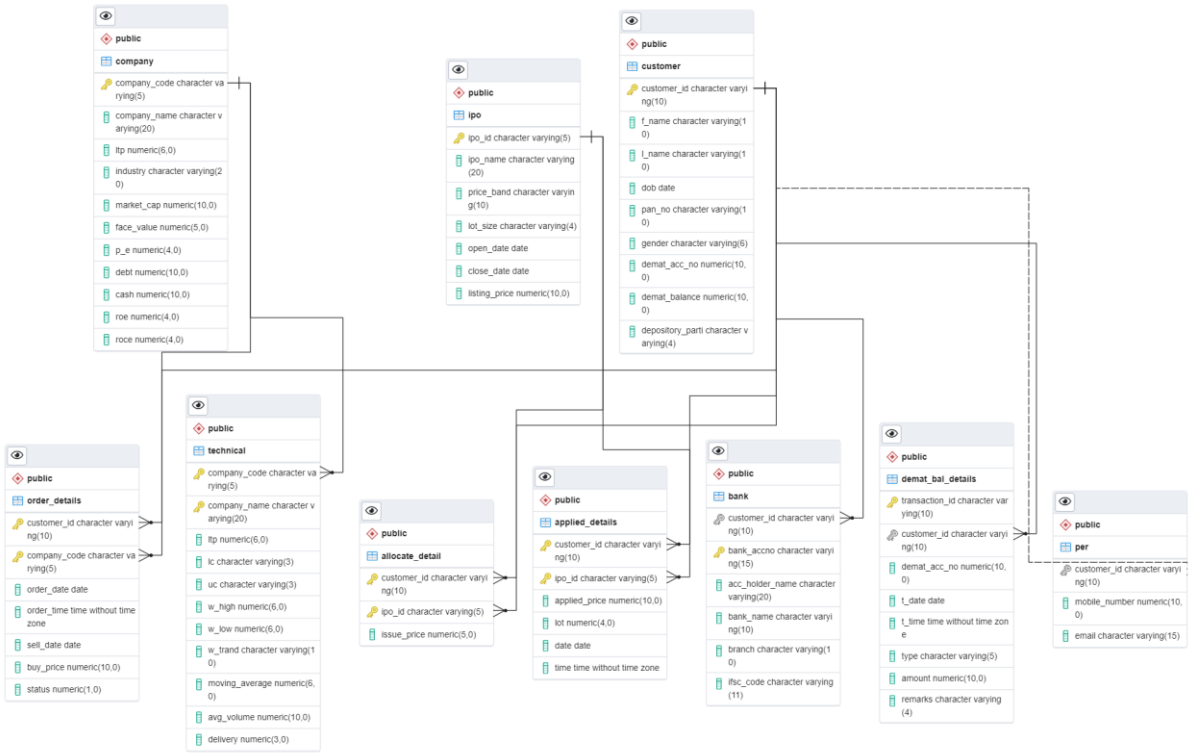
## Overview

Our Project has many modules as it provides IPO information, various company stock information, their fundamental and technical information. Also, users can find all personal or professional information that is available. Also, users can trade using this application. Create and Retrieve data officially.

## Requirement

- ☐ Using the CUSTOMER table users can find out their details Banking Details and transactions done by them such that it has Relations like Bank and Personal in which important data will be shared.
- ☐ Using the IPO table customers can retrieve the data of applied and allocated data for a particular IPO at any time. It has a relationship with the customer table using allocated details and applied details.
- ☐ The company table consists of its fundamental and technical attributes.it is also in a relationship with customers using order details data.
- ☐ Bank table used to retrieve bank-related data.Demat_bal_details is shown in any time interval transaction and many more.
- ☐ Retrieve as many as data most probability it would be good for as.
- ☐ A brokerage account is the type of account used to buy and sell securities like stocks, bonds, and mutual funds. You can transfer money into and out of a brokerage account much like a bank account, but unlike banks, brokerage accounts give you access to the stock market and other investments.


APPLIED_DETAILS
customer_id
IPO_ID
Applied_price
LOT
date
time
Applied
IPO
IPO_ID
IPO_name
price_band
Lot_size
OPEN_DATE
CLOSE_DATE
listing price
Allocated
ALLOCATE_DETAIL
customer_id
ipo_id
issue_price
CUSTOMER
customer_id
F_name
L_name
DOB
mobile number
email id
pan no
gender
Demat acc_no
Demat_balance
Depository Parti
PORTFOLIO
order details
customer_id
company_code
order_date
order_time
sell_date
buy_price
sell_price
Status
company
company_code
company_name
LTP
industry
Market Cap
Face Value
P/E
debt (cr)
cash (cr)
ROE
ROCE
technical
Technical
company_code
company_name
LTP
LC
UC
52 W High
52 W Low
52 W Trand
Moving Average
Avg Volume
Delivery
bank_details
BANK
customer_id
Bank_accno
Acc_holder_name
bank_name
Branch
IFSC_Code
Transction
demat_bal_details
transaction_id
customer_id
Demat-acc_no
date
time
type
amount
Remarks


public
company
company_code character varying(5)
company_name character varying(20)
ltp numeric(6,0)
industry character varying(20)
market_cap numeric(10,0)
face_value numeric(5,0)
p_e numeric(4,0)
debt numeric(10,0)
cash numeric(10,0)
roe numeric(4,0)
roce numeric(4,0)
public
ipo
ipo_id character varying(5)
ipo_name character varying(20)
price_band character varying(10)
lot_size character varying(4)
open_date date
close_date date
listing_price numeric(10,0)
public
customer
customer_id character varying(10)
f_name character varying(10)
l_name character varying(10)
dob date
pan_no character varying(10)
gender character varying(6)
demat_acc_no numeric(10,0)
demat_balance numeric(10,0)
depository_parti character varying(4)
public
order_details
customer_id character varying(10)
company_code character varying(5)
order_date date
order_time time without time zone
sell_date date
buy_price numeric(10,0)
status numeric(1,0)
public
technical
company_code character varying(5)
company_name character varying(20)
ltp numeric(6,0)
lc character varying(3)
uc character varying(3)
w_high numeric(6,0)
w_low numeric(6,0)
w_trand character varying(10)
moving_average numeric(6,0)
avg_volume numeric(10,0)
delivery numeric(3,0)
public
allocate_detail
customer_id character varying(10)
ipo_id character varying(5)
issue_price numeric(5,0)
public
applied_details
customer_id character varying(10)
ipo_id character varying(5)
applied_price numeric(10,0)
lot numeric(4,0)
date date
time time without time zone
public
bank
customer_id character varying(10)
bank_accno character varying(15)
acc_holder_name character varying(20)
bank_name character varying(10)
branch character varying(10)
ifsc_code character varying(11)
public
demat_bal_details
transaction_id character varying(10)
customer_id character varying(10)
demat_acc_no numeric(10,0)
t_date date
t_time time without time zone
type character varying(5)
amount numeric(10,0)
remarks character varying(4)
public
per
customer_id character varying(10)
mobile_number numeric(10,0)
email character varying(15)

```
CREATE TABLE CUSTOMER (
  customer_id varchar(10) primary key,
  f_name varchar(10) not null,
  l_name varchar(10)  not null,
  DOB date,

  pan_no varchar(10) not null,
  gender varchar(6) not null,
  Demat_acc_no numeric(10) not null,
  Demat_balance numeric(10) not null,
  Depository_Parti varchar(4) not null
);

insert into customer
values('1000000000','yash','parsana','08/08/2003','gjuoo8575J','male',1000000000,1000000,'cdsl');

insert into customer
values('1000000001','dharmesh','vala','02/08/2002','gjuoo5775y','male',1000000001,100000,'cdsl');

insert into customer
values('1000000002','mayur','parsana','05/12/2003','gfuoo1475k','female',1000000002,500000,'cdsl');

insert into customer
values('1000000003','priyank','dhamecha','08/12/2000','ktuoo5675t','female',1000000003,10000,'cdsl');

insert into customer
values('1000000004','hitesh','sakhiya','08/02/2000','ytuoo3275h','male',1000000004,102000,'cdsl');

insert into customer
values('1000000005','ubul','readdy','06/07/1990','druoo8775m','male',1000000005,103000,'cdsl');

insert into customer
values('1000000006','daksh','vavdiya','04/27/1996','ewuoo7575y','male',1000000006,16000,'cdsl');

insert into customer
values('1000000008','tejas','tank','04/27/1996','ewuoo7575y','male',1000000008,1600,'cdsl');

insert into customer
values('1000000009','rushabh','vala','04/27/1998','ewdeg7575y','male',1000000009,11000,'cdsl');

insert into customer
values('1000000007','jatin','vala','04/27/1998','ewder7575y','male',1000000009,13000,'cdsl');

CREATE TABLE company (
  company_code varchar(5) primary key,
  company_name varchar(20) not null,
  LTP numeric(6) not null,
  industry varchar(20) not null,
  Market_Cap numeric(10) not null ,
  Face_Value numeric(5) not null,
```

```
  P_E numeric(4) not null,
  debt numeric(10) not null ,
  cash numeric(10) not null,
  ROE numeric(4) not null,
  ROCE numeric(4) not null
);

insert into company values('10000','reliance',2600,'oil',1300000,10,20,15000,1000,15,10);
insert into company values('10001','tcs',3600,'it',1258635,20,35,0,7000,25,30);
insert into company values('10002','tatamoters',490,'automobile',200000,10,15,180000,0,2,1);
insert into company values('10003','tata chemical',131,'chemical',20424,10,50,1200,1000,15,10);
insert into company values('10004','mangalam organics',900,'chemical',1300,20,5,1500,1000,12,10);
insert into company values('10005','deepak nitrate',2600,'chemical',15000,10,60,150,1000,25,28);
insert into company values('10006','l&t',1800,'construct',250000,10,10,150,1000,25,60);
insert into company values('10007','dhama.ltd',1000,'it',150000,10,10,0,10000,30,32);
insert into company values('10008','irctc',896,'railyway',200000,10,5,0,1000,28,30);

CREATE TABLE IPO (
  IPO_ID varchar(5) primary key,
  IPO_name varchar(20),
  price_band varchar(10),
  lot_size varchar(4),
  open_date date,
  close_date date,
  listing_price numeric(10)
);

insert into IPO values('I01','zomoto','76-80','5','07/14/2021','07/16/2021',135);
insert into IPO values('I02','paras','165-175','85','09/21/2021','09/23/2021',170);
insert into IPO values('I03','nayka','1085-1100','12','10/28/2021','11/09/2021',900);
insert into IPO values('I04','vijaya','522-531','28','09/01/2021','09/03/2021',600);
insert into IPO values('I05','AMC','695-712','20','09/29/2021','10/01/2021',600);

CREATE TABLE APPLIED_DETAILS (
  customer_id varchar(10),
  ipo_id varchar(5),
  Applied_price numeric(10),
  LOT numeric(4),
```

```
 date date,
 time time,
        foreign key(customer_id) references customer on delete cascade,
        foreign key(ipo_id) references IPO on delete cascade,
        primary key(customer_id,ipo_id)
);

insert into applied_details values('1000000000','I01',76,2,'06/25/21','02:12:35');
insert into applied_details values('1000000001','I01',73,1,'06/20/21','04:20:45');
insert into applied_details values('1000000002','I01',74,3,'06/15/21','12:14:15');
insert into applied_details values('1000000001','I02',55,1,'06/16/21','21:54:05');
insert into applied_details values('1000000003','I01',78,5,'06/25/21','21:42:45');
insert into applied_details values('1000000003','I03',51,4,'06/23/1','02:24:12');

CREATE TABLE ALLOCATE_DETAIL (
 customer_id varchar(10),
 ipo_id varchar(5),
 issue_price numeric(5),
        foreign key(customer_id) references customer on delete cascade,
        foreign key(ipo_id) references IPO on delete cascade,
        primary key(customer_id,ipo_id)

);

insert into allocate_detail values('1000000000','I01',76);
insert into allocate_detail values('1000000001','I02',165);
insert into allocate_detail values('1000000002','I03',1100);
insert into allocate_detail values('1000000003','I01',76);
insert into allocate_detail values('1000000004','I02',165);
insert into allocate_detail values('1000000005','I01',76);
insert into allocate_detail values('1000000006','I03',1100);
insert into allocate_detail values('1000000007','I01',76);


create table per(
customer_id varchar(10),
mobile_number numeric(10),
email varchar(15),
```

```
        foreign key(customer_id) references customer on delete cascade
);

CREATE TABLE BANK (
  customer_id varchar(10),
  Bank_accno varchar(15) primary key,
  Acc_holder_name varchar(20) not null,
  bank_name varchar(10) not null,
  Branch varchar(10) not null,
  IFSC_Code varchar(11) not null,
        foreign key(customer_id) references customer on delete cascade
);

insert into bank values('1000000000','10000000000000','yash parsana','kotak','811','hbjkl745784');
insert into bank values('1000000001','10000000000001','dharmesh vala','sbi','varchha','hgfte457897');
insert into bank values('1000000002','10000000000002','mayur parsana','hdfc','anand','jftsq457846');
insert into bank values('1000000003','10000000000003','priyank dhamecha','axis','vadodara','jtfer157498');
insert into bank values('1000000004','10000000000004','hitesh sakhiya','icici','yogichowk','hruvl547894');
insert into bank values('1000000005','10000000000005','ubul readdy','sbi','valanja','ioqzl789456');
insert into bank values('1000000006','10000000000006','daksh vavdiya','kotak','hirabaug','spuce873546');


CREATE TABLE demat_bal_details (
  transaction_id varchar(10) primary key,
  customer_id varchar(10),
  Demat_acc_no numeric(10),
  t_date date,
  t_time time,
  type varchar(5),
  amount numeric(10),
  Remarks varchar(4),
        foreign key(customer_id) references customer
);
insert into demat_bal_details
values('10001','1000000000',1000000000,'05/02/2021','23:05:00','w',10000,'succ');
insert into demat_bal_details
values('10002','1000000001',1000000001,'05/08/2021','02:05:00','w',5000,'succ');
insert into demat_bal_details values('10003','1000000000',1000000000,'06/02/2021','11:25:00','d',700,'fail');
```

```
insert into demat_bal_details
values('10004','1000000001',1000000001,'05/12/2021','13:05:00','d',80000,'fail');

insert into demat_bal_details
values('10005','1000000000',1000000000,'05/23/2021','08:10:00','d',9000,'succ');

DROP TABLE demat_bal_details;


CREATE TABLE order_details (
  customer_id varchar(10),
  company_code varchar(5),
  order_date date,
  order_time time,
  sell_date date,
  buy_price numeric(10),
  status numeric(1),
        foreign key(customer_id) references customer on delete cascade,
        foreign key(company_code) references company on delete cascade,
        primary key(customer_id,company_code)
);

insert into order_details values('1000000000','10000','05/06/2021','12:10:50',null,490,1);
insert into order_details values('1000000001','10000','05/25/2021','12:50:50',null,498,1);
insert into order_details values('1000000002','10000','05/23/2021','02:10:50',null,494,0);
insert into order_details values('1000000003','10000','05/08/2021','01:10:50',null,290,1);
insert into order_details values('1000000004','10000','05/22/2021','09:10:50',null,507,1);
insert into order_details values('1000000005','10002','05/02/2021','09:10:50',null,507,1);
insert into order_details values('1000000006','10003','05/12/2021','09:10:50',null,507,1);
insert into order_Details values('1000000009','10003','05/12/2021','09:10:50',null,800,1);
insert into order_Details values('1000000007','10003','05/12/2021','09:10:50',null,808,1);


CREATE TABLE Technical (
  company_code varchar(5),
  company_name varchar(20),
  LTP numeric(6),
 LC varchar(3),
  UC varchar(3),
  W_High numeric(6),
  W_Low numeric(6),
  W_Trand varchar(10),
```

```
 Moving_Average numeric(6),
 Avg_Volume numeric(10),
 Delivery numeric(3),
        foreign key(company_code) references company on delete cascade,
        primary key(company_code,company_name)

);

insert into technical values('10000','reliance',2600,'5%','5%',2650,1800,'bullish',2605,500000,30);
insert into technical values('10001','tcs',3600,'7%','7%',3800,2500,'bullish',3750,200000,40);
insert into technical values('10002','tatamoters',490,'5%','5%',600,160,'bullish',450,350000,20);
insert into technical values('10003','tata chemical',131,'10%','10%',200,50,'bullish',142,500000,25);
insert into technical values('10004','mangalm organics',790,'5%','5%',800,500,'bullish',800,1000,22);
insert into technical values('10005','deepak nitrate',2600,'5%','5%',2670,1200,'bullish',2610,450000,60);
insert into technical values('10006','l&t',1800,'5%','5%',2500,1000,'bullish',1801,450000,60);
insert into technical values('10007','dhama.ltd',2500,'5%','5%',2700,2000,'bullish',2510,24500,50);
insert into technical values('10008','irctc',896,'6%','6%',2600,300,'bullish',890,540000,40);

                    ~~!@!@!@ 10 effective Query @!@!@!~~

1---->
---Find customer id,name and demat balance who apply in reliance having company_id as 10000 in between----
                                -----05/05/2021 to 25/05/2021 and also it would be open----

select customer.customer_id, customer.f_name ||' '||customer.l_name as name, customer.demat_acc_no from customer inner join
order_details on (customer.customer_id=order_details.customer_id) where ((order_details.company_code='10000')
  and (order_details.status=1) and (order_details.order_date >'05/05/2021' and order_details.order_date <'05/25/2021'));

2---->
----user with pan_no as gjuoo8575j  want to make last month success transaction report. write query to help him.---

select customer.f_name,d.transaction_id,d.customer_id,d.demat_acc_no,d.t_date,d.t_time,d.type,d.amount from customer inner join
demat_bal_details as d on customer.customer_id = d.customer_id where (customer.pan_no='gjuoo8575J' and d.remarks='succ'
```

```
                                        and (d.t_date>='05/01/2021' and d.t_date<='05/31/2021'));
```

**3----->**

**---find customer name and demat account number who applied in zomoto IPO with lot size greater than 1.---**

```
select  customer.f_name ||' '||customer.l_name as name, customer.demat_acc_no from customer inner join applied_details on

(customer.customer_id=applied_details.customer_id) where LOT>1 and IPO_id='I01';
```

**4---->**

**----count company in which customer invested. (use group by to perform query)----**

```
select count(*), company_code from order_details group by company_code;
```

**5---->**

**---find company's technical details in which customer invested and status is open till now---**

```
select order_details.customer_id,c.company_Code,
c.company_name,c.LTP,c.LC,c.UC,c.moving_average,c.W_high,c.W_low,c.W_trand,

c.avg_volume,c.delivery from technical as c inner join  order_details on
(c.company_code=order_details.company_code)

                where status=1;
```

**6----->**

**-- reterive trasaction average amount by their type ---**

```
select type,avg(amount) from demat_bal_details group by type;
```

**7----->**

**--- find company name and unique id which has ROE and ROCE greater than 12 and P/E ratio greater than 22 and**

**---delivery greater than 20 and having ltp less 52 week high price. ---**

```
select t.company_name,t.company_code from company as t natural join technical where (
(t.ROE>12)and(t.roce>12)and(t.p_e<22 )

            and(technical.delivery>20)and(technical.ltp<technical.W_high));
```

**8------>**

**-- find customer name and their demat balance who invested in reliance and also applied in Zomato IPO with lot**

**---between 1-3 and applied price at greater than 74. ---**

```
select customer.f_name||' '||customer.l_name as Name ,customer.demat_balance from customer natural join order_details

natural join applied_details where order_details.company_code='10000' and applied_details.ipo_id='I01'

and applied_details.applied_price>74 and applied_details.lot between 1 and 3;
```

**9----->**

**-----find customer name, IPO name and profit in which customer apply in any IPO company also they got that**

**---IPO with +ve profit----**

```
select customer.f_name||' '||customer.l_name as Name,

round((((ipo.listing_price-allocate_detail.issue_price)/allocate_detail.issue_price)*100),2) as Profit,

ipo.ipo_name from customer natural join allocate_detail natural join ipo where

round((((ipo.listing_price-allocate_detail.issue_price)/allocate_detail.issue_price)*100),2)>0;
```

**10----->**

**-- retrive data of customer who buy stock at greater than average price of that day of company with code as 10003 on 05/12/2021.**

```
select * from customer natural join order_details where (order_details.company_code='10003' and

order_Details.order_date='05/12/2021' and (order_details.buy_price>=(select avg(buy_price) from order_details where company_code='10003')));
```