DAY-2 ASSIGNMENT(29-12-2025)

1) create database InsuranceDB;

use InsuranceDB;

2)

```
--customers table creation

create table customers(
customerid int identity primary key,
firstname varchar(50),
lastname varchar(50),
dob date,
phone varchar(10),
email varchar(30) unique
);

--policies table creation

create table policies(
policyid int identity(200,1) primary key,
policyname varchar(50),
policytype varchar(50),
premiumamount decimal(10,2),
durationyears int);

--agents table creation

create table agents(
agentid int identity(300,1) primary key,
agentname varchar(50),
phone varchar(10),
city varchar(50));

--policyassignments table creation

create table policyassignments(
assignmentid int identity(1,1) primary key,
customerid int,
policyid int,
agentid int,
startdate date,
enddate date,
constraint fk_customer_id foreign key (customerid) references customers(customerid),
constraint fk_policy_id foreign key(policyid) references policies(policyid),
constraint fk_agent_id foreign key(agentid) references agents(agentid)
);
```

```
--claims table creation

create table claims(
claimid int identity(400,1) primary key,
assignmentid int,
claimdate date,
claimmoney decimal(10,2),
claimstatus varchar(50),
constraint fk_assignment_id foreign key(assignmentid) references
policyassignments(assignmentid)
);



3)
 --insertion of data into customers

INSERT INTO customers (firstname, lastname, dob, phone, email) VALUES
('Rahul', 'Sharma', '1995-04-12', '9876543210', 'rahul@gmail.com'),
('Anita', 'Verma', '1998-08-20', '9123456789', 'anita@gmail.com'),
('Suresh', 'Kumar', '1990-01-15', '9988776655', 'suresh@gmail.com'),
('Priya', 'Singh', '1997-06-10', '9090909090', 'priya@gmail.com'),
('Amit', 'Patel', '1993-11-25', '9555666777', 'amit@gmail.com');

--insertion of data into policies

INSERT INTO policies (policyname, policytype, premiumamount, durationyears) VALUES
('Health Secure', 'Health', 12000.00, 5),
('Life Shield', 'Life', 15000.00, 10),
('Car Protect', 'Vehicle', 8000.00, 3),
('Home Safe', 'Property', 10000.00, 7),
('Travel Guard', 'Travel', 5000.00, 1);

--insertion of data into agents

INSERT INTO agents (agentname, phone, city) VALUES
('Ramesh Rao', '8888888888', 'Hyderabad'),
('Sunita Das', '7777777777', 'Bangalore'),
('Kiran Mehta', '6666666666', 'Mumbai'),
('Neha Jain', '9999999999', 'Delhi'),
('Arjun Nair', '5555555555', 'Chennai');

--insertion of data into policyassignments

INSERT INTO policyassignments (customerid, policyid, agentid, startdate, enddate)
VALUES
(1, 200, 300, '2023-01-01', '2028-01-01'),
(2, 201, 301, '2022-05-15', '2032-05-15'),
(3, 202, 302, '2024-03-10', '2027-03-10'),
(4, 203, 303, '2021-09-20', '2028-09-20'),
(5, 204, 304, '2024-01-05', '2025-01-05');
```

```
--insertion of data into claims

INSERT INTO claims (assignmentid, claimdate, claimmoney, claimstatus) VALUES
(1, '2024-02-10', 50000.00, 'Approved'),
(2, '2023-11-05', 100000.00, 'Pending'),
(3, '2024-06-18', 20000.00, 'Rejected'),
(4, '2022-12-25', 75000.00, 'Approved'),
(5, '2024-08-01', 15000.00, 'Pending');
```

4.1) `select * from customers;`

Results | Messages

	customerid	firstname	lastname	dob	phone	email
1	1	Rahul	Sharma	1995-04-	Click to select the whole column	
2	2	Anita	Verma	1998-08-20	9123456789	anita@gmail.com
3	3	Suresh	Kumar	1990-01-15	9988776655	suresh@gmail.com
4	4	Priya	Singh	1997-06-10	9090909090	priya@gmail.com
5	5	Amit	Patel	1993-11-25	9555666777	amit@gmail.com

4.2) `select customerid,policyid,startdate,enddate from policyassignments;`

Results | Messages

	customerid	policyid	startdate	enddate
1	1	200	2023-01-01	2028-01-01
2	2	201	2022-05-15	2032-05-15
3	3	202	2024-03-10	2027-03-10
4	4	203	2021-09-20	2028-09-20
5	5	204	2024-01-05	2025-01-05

4.3)
```
select *from policies
  where policytype='health';
```

Results | Messages

	policyid	policyname	policytype	premiumamount	durationyears
1	200	Health Secure	Health	12000.00	5

4.4)
```
select * from policies
  where premiumamount>10000 and durationyears=1;
```

Results Messages

policyid	policyname	policytype	premiumamount	durationyears

4.5) select distinct city from agents;

Results Messages

	city
1	Bangalore
2	Chennai
3	Delhi
4	Hyderabad
5	Mumbai

4.6) select * from policies
where policytype='Life' or policytype= 'Health' or policytype='Motor';

Results Messages

	policyid	policyname	policytype	premiumamount	durationyears
1	200	Health Secure	Health	12000.00	5
2	201	Life Shield	Life	15000.00	10

4.7) select * from policies
where policytype in ('Life','Health','Motor');

Results Messages

	policyid	policyname	policytype	premiumamount	durationyears
1	200	Health Secure	Health	12000.00	5
2	201	Life Shield	Life	15000.00	10

4.8) select * from customers
where dob>='2001-01-01'
and dob<='2020-12-30';

Results Messages

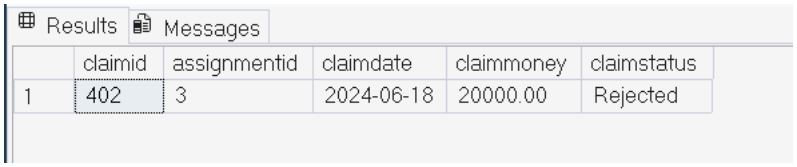
customerid	firstname	lastname	dob	phone	email

4.9) select * from customers
where dob between '2001-01-01'
and '2020-12-30';


Results Messages

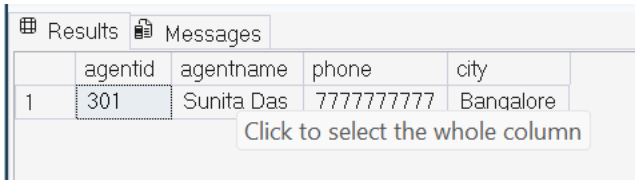
customerid	firstname	lastname	dob	phone	email

4.10) select * from claims
where claimstatus='rejected';


Results Messages

	claimid	assignmentid	claimdate	claimmoney	claimstatus
1	402	3	2024-06-18	20000.00	Rejected

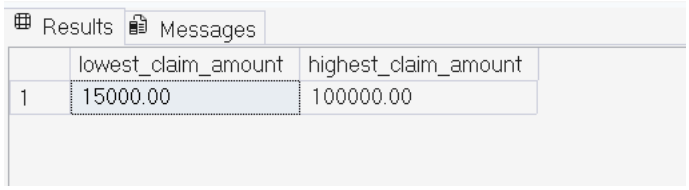
4.11) select * from agents
where city like '_a%';


Results Messages

	agentid	agentname	phone	city
1	301	Sunita Das	7777777777	Bangalore

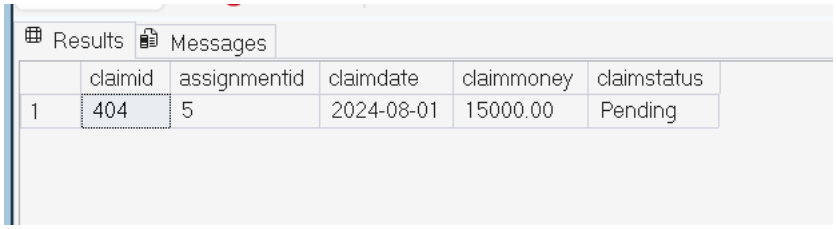
Click to select the whole column

4.12) SELECT
MIN(claimmoney) AS lowest_claim_amount,
MAX(claimmoney) AS highest_claim_amount
FROM claims;


Results Messages

	lowest_claim_amount	highest_claim_amount
1	15000.00	100000.00

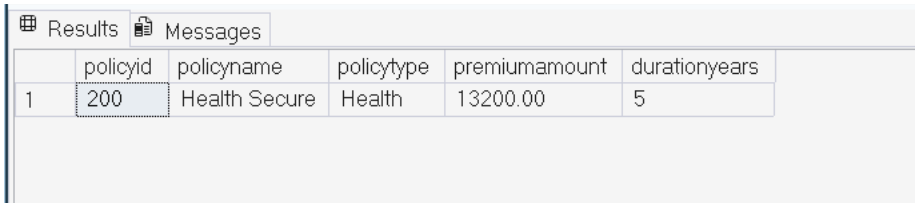
4.13) select * from claims where
claimdate=(select max(claimdate) from claims);



Results | Messages

	claimid	assignmentid	claimdate	claimmoney	claimstatus
1	404	5	2024-08-01	15000.00	Pending

4.14)
```
update policies
set premiumamount=premiumamount*1.10
where policytype='Health';
select * from policies
where policytype='Health';
```



Results | Messages

	policyid	policyname	policytype	premiumamount	durationyears
1	200	Health Secure	Health	13200.00	5

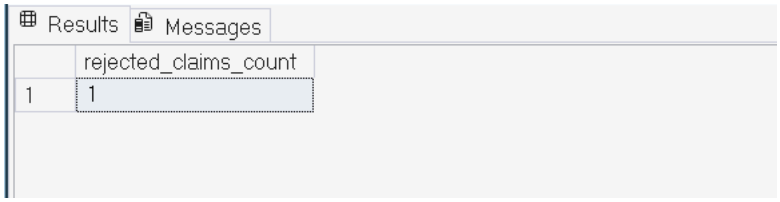
4.15)
```
delete from policyassignments
where enddate<cast(GETDATE() as date);
```

Messages

```
Msg 547, Level 16, State 0, Line 235
The DELETE statement conflicted with the REFERENCE constraint "fk_assignment_id". The conflict occurred in database "InsuranceDB",
The statement has been terminated.

Completion time: 2025-12-29T19:15:51.5504775+05:30
```

4.16)
```
select count(*) as rejected_claims_count
from claims
where claimstatus='Rejected';
```

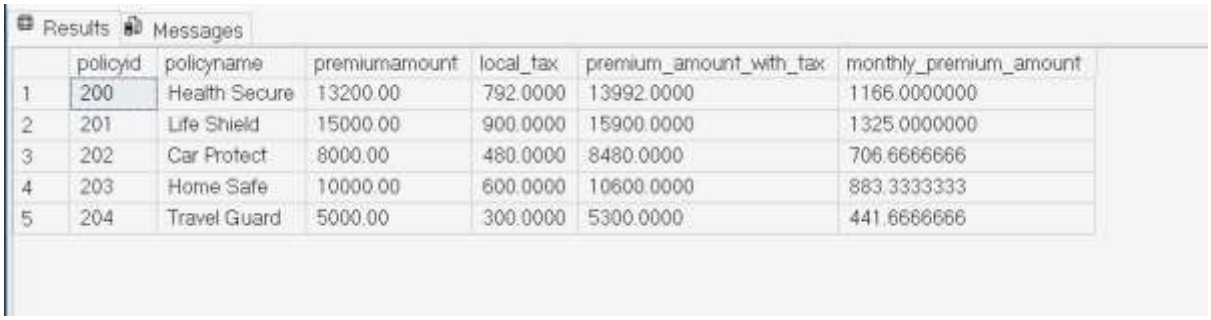


Results | Messages

	rejected_claims_count
1	1

4.17)
```
select policyid,policyname,premiumamount,
premiumamount*0.06 as local_tax,
premiumamount*1.06 as premium_amount_with_tax,
```

```
(premiumamount*1.06)/12 as monthly_premium_amount
from policies;
```



Results Messages

	policyid	policyname	premiumamount	local_tax	premium_amount_with_tax	monthly_premium_amount
1	200	Health Secure	13200.00	792.0000	13992.0000	1166.0000000
2	201	Life Shield	15000.00	900.0000	15900.0000	1325.0000000
3	202	Car Protect	8000.00	480.0000	8480.0000	706.6666666
4	203	Home Safe	10000.00	600.0000	10600.0000	883.3333333
5	204	Travel Guard	5000.00	300.0000	5300.0000	441.6666666

4.18)
```
alter table customers
add address varchar(50),
city varchar(50);
select * from customers;
```

Results Messages

	customerid	firstname	lastname	dob	phone	email	address	city
1	1	Rahul	Sharma	1995-04-12	9876543210	rahul@gmail.com	NULL	NULL
2	2	Anita	Verma	1998-08-20	9123456789	anita@gmail.com	NULL	NULL
3	3	Suresh	Kumar	1990-01-15	9988776655	suresh@gmail.com	NULL	NULL
4	4	Priya	Singh	1997-06-10	9090909090	priya@gmail.com	NULL	NULL
5	5	Amit	Patel	1993-11-25	9555666777	amit@gmail.com	NULL	NULL

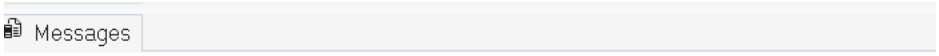
4.19)
```
alter table agents
add devofid int;
select * from agents;
```

Results Messages

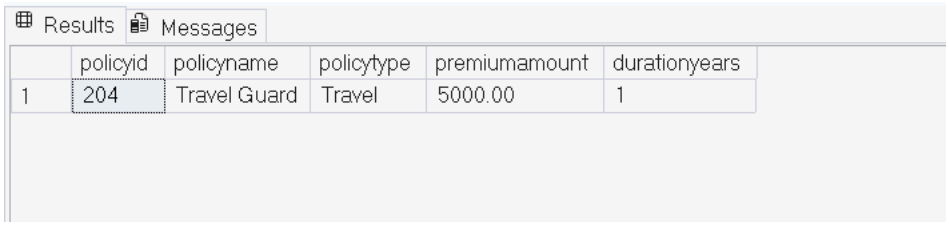
	agentid	agentname	phone	city	devofid
1	300	Ramesh Rao	8888888888	Hyderabad	NULL
2	301	Sunita Das	7777777777	Bangalore	NULL
3	302	Kiran Mehta	6666666666	Mumbai	NULL
4	303	Neha Jain	9999999999	Delhi	NULL
5	304	Arjun Nair	5555555555	Chennai	NULL

4.20)
```
alter table agents
add constraint fk_devofid_agents
foreign key(devofid) references
```

```
agents(agentid);
```



5.1)
```
select
p.policyid,
p.policyname,p.policytype,p.premiumamount,p.durationyears
from policies p join policyassignments pa
on p.policyid=pa.policyid
where pa.customerid=5;
```



	policyid	policyname	policytype	premiumamount	durationyears
1	204	Travel Guard	Travel	5000.00	1

5.2)
```
select
c.firstname+' '+c.lastname as customer_name,
p.policyname from customers c
join policyassignments pa on
c.customerid=pa.customerid
join policies p on p.policyid=pa.policyid;
```

Results Messages

	customer_name	policyname
1	Rahul Sharma	Health Secure
2	Anita Verma	Life Shield
3	Suresh Kumar	Car Protect
4	Priya Singh	Home Safe
5	Amit Patel	Travel Guard

5.3)
```
select c.customerid,c.firstname+' '+c.lastname as customer_name,
  cl.claimid,cl.claimdate,cl.claimmoney,cl.claimstatus from policyassignments pa
  join claims cl on pa.assignmentid=cl.assignmentid
 join customers c on c.customerid=pa.customerid;
```

Results Messages

	customerid	customer_name	claimid	claimdate	claimmoney	claimstatus
1	1	Rahul Sharma	400	2024-02-10	50000.00	Approved
2	2	Anita Verma	401	2023-11-05	100000.00	Pending
3	3	Suresh Kumar	402	2024-06-18	20000.00	Rejected
4	4	Priya Singh	403	2022-12-25	75000.00	Approved
5	5	Amit Patel	404	2024-08-01	15000.00	Pending

5.4)
```
select c.firstname,p.policyname,a.agentname,pa.startdate,pa.enddate
  from policyassignments pa join customers c
  on pa.customerid=c.customerid
  join policies p on pa.policyid=p.policyid
  join agents a on a.agentid=pa.agentid
  order by pa.startdate;
```

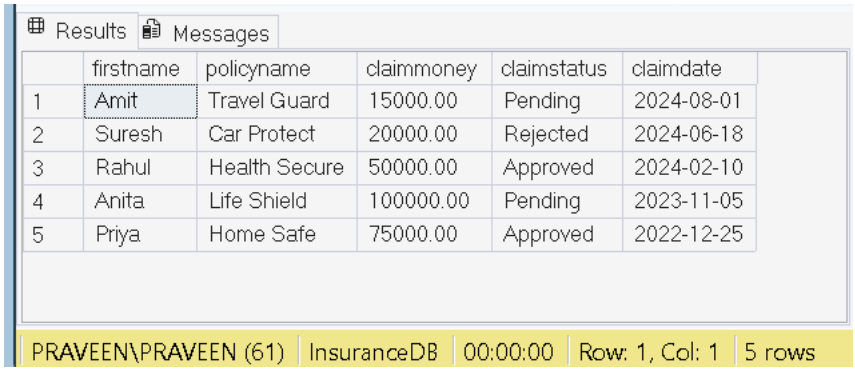
Results Messages

	firstname	policyname	agentname	startdate	enddate
1	Priya	Home Safe	Neha Jain	2021-09-20	2028-09-20
2	Anita	Life Shield	Sunita Das	2022-05-15	2032-05-15
3	Rahul	Health Secure	Ramesh Rao	2023-01-01	2028-01-01
4	Amit	Travel Guard	Arjun Nair	2024-01-05	2025-01-05
5	Suresh	Car Protect	Kiran Mehta	2024-03-10	2027-03-10

PRAVEEN\PRAVEEN (61) | InsuranceDB | 00:00:00 | Row: 1, Col: 1 | 5 rows

5.5)
```
select c.firstname,p.policyname,cl.claimmoney,cl.claimstatus,cl.claimdate
```

```
from claims cl join policyassignments pa on
cl.assignmentid=pa.assignmentid
join customers c
on pa.customerid=c.customerid
join policies p
on pa.policyid=p.policyid
order by cl.claimdate desc;
```

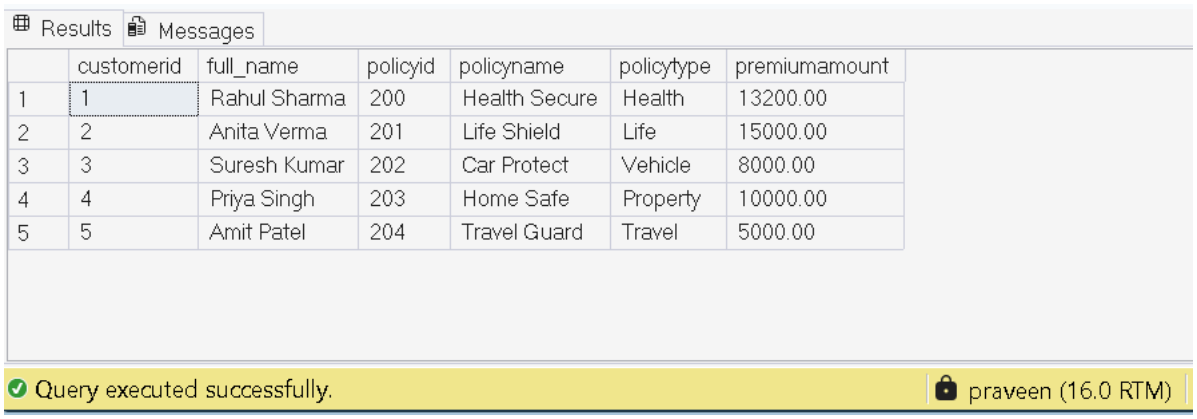


Results | Messages

	firstname	policyname	claimmoney	claimstatus	claimdate
1	Amit	Travel Guard	15000.00	Pending	2024-08-01
2	Suresh	Car Protect	20000.00	Rejected	2024-06-18
3	Rahul	Health Secure	50000.00	Approved	2024-02-10
4	Anita	Life Shield	100000.00	Pending	2023-11-05
5	Priya	Home Safe	75000.00	Approved	2022-12-25

PRAVEEN\PRAVEEN (61) | InsuranceDB | 00:00:00 | Row: 1, Col: 1 | 5 rows

5.6)
```
select c.customerid,c.firstname+' '+c.lastname as full_name,
p.policyid,p.policyname,p.policytype,p.premiumamount
from customers c left join policyassignments pa
on pa.customerid=c.customerid left join
policies p on pa.policyid=p.policyid
order by c.customerid;
```



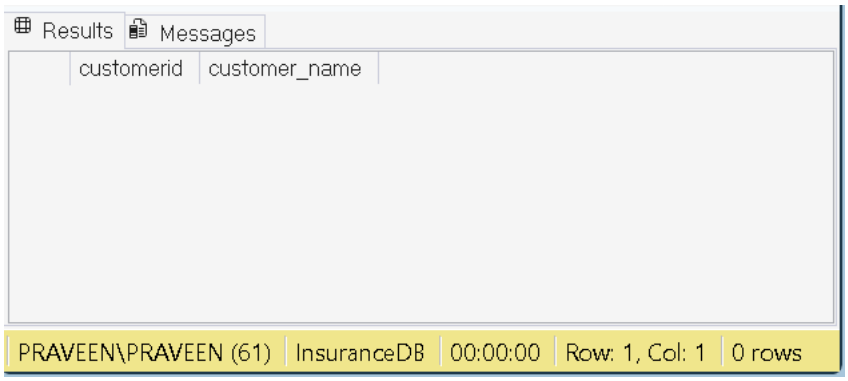
Results | Messages

	customerid	full_name	policyid	policyname	policytype	premiumamount
1	1	Rahul Sharma	200	Health Secure	Health	13200.00
2	2	Anita Verma	201	Life Shield	Life	15000.00
3	3	Suresh Kumar	202	Car Protect	Vehicle	8000.00
4	4	Priya Singh	203	Home Safe	Property	10000.00
5	5	Amit Patel	204	Travel Guard	Travel	5000.00

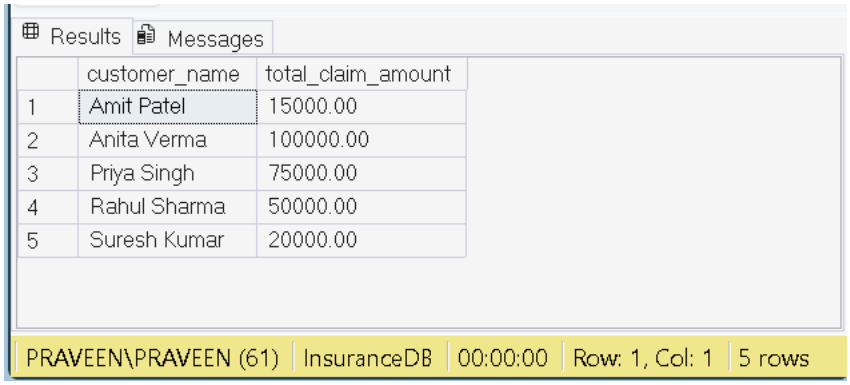
Query executed successfully. | praveen (16.0 RTM)

5.7)
```
select distinct
c.customerid,c.firstname+' '+c.lastname as customer_name
from customers c
left join policyassignments pa
on c.customerid=pa.customerid
left join claims cl
on pa.assignmentid=cl.assignmentid
```

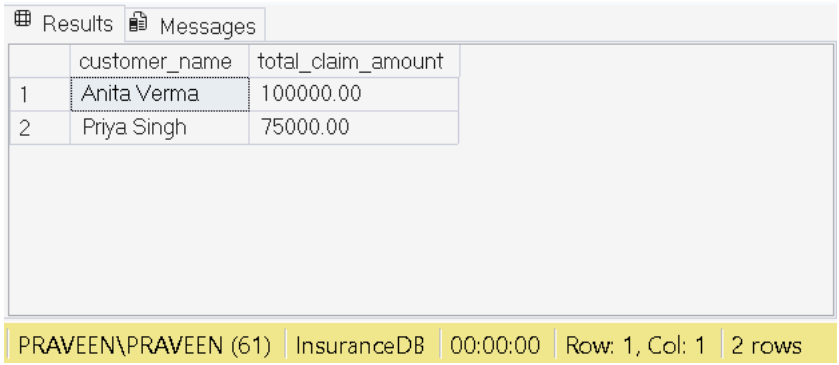
```
where cl.claimid is null;
```



5.8)
```
select c.firstname+' '+c.lastname as customer_name,
sum(cl.claimmoney) as total_claim_amount
from customers c join
policyassignments pa on
pa.customerid=c.customerid
join claims cl on
cl.assignmentid=pa.assignmentid
by c.firstname,c.lastname;
```



5.9)
```
select c.firstname+' '+c.lastname as customer_name,
sum(cl.claimmoney) as total_claim_amount
from customers c join
policyassignments pa on
pa.customerid=c.customerid
join claims cl on
cl.assignmentid=pa.assignmentid
group by c.firstname,c.lastname
having sum(cl.claimmoney)>50000;
```



5.10)
```
select a.agentname ,count(pa.policyid) as policy_count
from agents a left join policyassignments pa
on a.agentid=pa.agentid
group by a.agentname;
```