CSE370 : Database Systems

Assignment 03 | Summer 2025

ID : 23201003 | Name : MASRUR SARAR

No 1 Query (as Plain Text)

```
select c.customer_name,b.loan_number from customer c,borrower b,loan l
where c.customer_id=b.customer_id and b.loan_number=l.loan_number
 and l.branch_name='Downtown';
```

No 1 SS (of Query & Output in Shell)

```
1 select c.customer_name,b.loan_number from customer c,borrower b,loan l
2 where c.customer_id=b.customer_id and b.loan_number=l.loan_number
3   and l.branch_name='Downtown';
```

customer_name	loan_number
Johnson	L-14
Jones	L-17
Williams	L-17

No 2 Query (as Plain Text)

```
select c1.customer_name,c2.customer_name,c1.customer_city from customer c1, customer c2
where c1.customer_city = c2.customer_city and c1.customer_id < c2.customer_id;
```

No 2 SS (of Query & Output in Shell)

```
1 select c1.customer_name,c2.customer_name,c1.customer_city from customer c1, customer c2
2 where c1.customer_city = c2.customer_city and c1.customer_id < c2.customer_id;
```

customer_name	customer_name	customer_city
Jones	Hayes	Harrison
Smith	Curry	Rye
Lindsay	Adams	Pittsfield
Turner	Green	Stamford

No 3 Query (as Plain Text)

```
SELECT a.branch_name, SUM(a.balance * 0.04) from account a group by a.branch_name;
```

No 3 SS (of Query & Output in Shell)

```
1  SELECT a.branch_name, SUM(a.balance * 0.04) from account a group by a.branch_name;
```

branch_name	SUM(a.balance * 0.04)
Brighton	66.00
Downtown	20.00
Mianus	28.00
Perryridge	16.00
Redwood	28.00
Round Hill	14.00

No 4 Query (as Plain Text)

```
select a.account_number,b.branch_city from account a,branch b
  where a.branch_name = b.branch_name and
  (b.branch_city, a.balance) in
    (select b.branch_city, max(a.balance) from account a,branch b
      where a.branch_name = b.branch_name group by b.branch_city);
```

No 4 SS (of Query & Output in Shell)

```
1  select a.account_number,b.branch_city from account a,branch b
2    where a.branch_name = b.branch_name and
3    (b.branch_city, a.balance) in
4      (select b.branch_city, max(a.balance) from account a,branch b
5         where a.branch_name = b.branch_name group by b.branch_city);
```

account_number	branch_city
A-201	Brooklyn
A-215	Horseneck
A-222	Palo Alto

No 5 Query (as Plain Text)

```
select l.loan_number, l.amount, c.customer_name from loan l,borrower b,customer c
where l.loan_number = b.loan_number and b.customer_id = c.customer_id
order by l.amount asc, l.loan_number desc limit 5;
```

No 5 SS (of Query & Output in Shell)

```
select l.loan_number, l.amount, c.customer_name from loan l,borrower b,customer c
where l.loan_number = b.loan_number and b.customer_id = c.customer_id
order by l.amount asc, l.loan_number desc limit 5;
```

loan_number	amount	customer_name
L-93	500	Curry
L-11	900	Smith
L-17	1000	Jones
L-17	1000	Williams
L-16	1300	Adams

No 6 Query (as Plain Text)

select distinct c.customer_name from customer c,depositor d,account a,borrower b,loan l
where c.customer_id = d.customer_id and d.account_number = a.account_number
and c.customer_id = b.customer_id and b.loan_number = l.loan_number
and a.branch_name = 'Perryridge' and l.branch_name = 'Perryridge';

No 6 SS (of Query & Output in Shell)

```
select distinct c.customer_name from customer c,depositor d,account a,borrower b,loan l
where c.customer_id = d.customer_id and d.account_number = a.account_number
  and c.customer_id = b.customer_id and b.loan_number = l.loan_number
  and a.branch_name = 'Perryridge' and l.branch_name = 'Perryridge';
```

customer_name
Hayes

No 7 Query (as Plain Text)

select c.customer_name, SUM(l.amount) from customer c,borrower b,loan l
where c.customer_id = b.customer_id and b.loan_number = l.loan_number
group by c.customer_id, c.customer_name having COUNT(*) >= 2;

No 7 SS (of Query & Output in Shell)

```
select c.customer_name, SUM(l.amount) from customer c,borrower b,loan l
where c.customer_id = b.customer_id and b.loan_number = l.loan_number
group by c.customer_id, c.customer_name having COUNT(*) >= 2;
```

customer_name	SUM(l.amount)
Smith	2900