DBMS TEST QUESTIONS

${\bf Part-1}$ Below are the tables which will be used in the following queries.

Table 1: Deposit

ACTNO	CNAME	BNAME	AMOUNT	ADATE
100	Anil	vrce_ambazari	1000	3/1/1995
101	Sunil	ajni	5000	1/4/1996
102	Mehul	karolbagh	3500	11/17/1995
104	Madhuri	chandnichowk	1200	12/17/1995
105	Pramod	m.g.road	3000	3/27/1996
106	Sandip	andheri	2000	3/31/1996
107	Shivani	virar	1000	9/5/1995
108	Kranti	nehruplace	5000	7/2/1995
109	Minu	powai	7000	8/10/1995

Table 2: Branch

BNAME	CITY
Vrce	nagpur
Ajni	nagpur
Karolbagh	delhi
chandnichowk	delhi
dharampeth	nagpur
m.g.road	banglore
Andheri	bombay
Virar	bombay
Nehrplace	delhi
Powai	bombay

Table 3: Customers

CNAME	CITY
anil	calcutta
sunil	delhi
mehul	baroda
mandar	patna
madhuri	nagpur

pramod	nagpur
sandip	surat
shivani	bombay
kranti	bombay
naren	bombay

Table 4: Borrow

LOANNO	CNAME	BNAME	AMOUNT
201	anil	vrce	1000
206	mehul	ajni	5000
311	sunil	dharampeth	3000
321	madhuri	andheri	2000
375	pramod	virar	8000
481	kranti	nehruplace	3000

Table Creation

Deposit_Aman Table

create table deposit_aman (b_id int,c_id int,actno int, cname varchar(10),bname varchar(15), amount int, adate date)

insert into deposit_aman values

(1,1,100,'Anil','vrce',1000,'1995-3-1'),

(2,2,101,'Sunil','ajni',5000,'1996-1-4'),

(3,3,102,'Mehul','karolbagh',3500,'1995-11-17'),

(4,5,104, 'Madhuri', 'chandnichowk', 1200, '1995-12-17'),

```
(6,6,105,'Pramod','m.g.road',3000,'1996-3-27'), (7,7,106,'Sandip','andheri',2000,'1996-3-31'), (8,8,107,'Shivani','virar',1000,'1995-9-5'), (9,9,108,'Kranti','nehruplace',5000,'1995-7-2'), (10,11,109,'Minu','powai',7000,'1995-8-10')
```

Branch_Aman Table

```
create table branch_aman (b_id int identity(1,1)not null,bname varchar(15),city varchar(12))
```

insert into branch_aman(bname,city) values

('Vrce', 'nagpur'), ('Ajni', 'nagpur'),

('Karolbagh','delhi'),('chandnichowk','delhi'),

('dharampeth', 'nagpur'), ('m.g.road', 'banglore'),

('Andheri', 'bombay'), ('Virar', 'bombay'),

('Nehruplace','delhi'),('Powai','bombay')

Customers_Aman Table

```
create table customers_aman(c_id int identity(1,1) not null,cname varchar(10),city varchar(12))
```

insert into customers_aman(cname,city) values

('anil', 'calcutta'), ('sunil', 'delhi'),

```
('mehul', 'baroda'), ('mandar', 'patna'),
('madhuri', 'nagpur'), ('pramod', 'nagpur'),
('kranti', 'bombay'), ('naren', 'bombay'),
('sandip', 'surat'), ('shivani', 'bombay')
```

Borrow_Aman Table

create table borrow_aman(b_id int, c_id int,loanno int,cname varchar(10), bname varchar(15),amount int);

insert into borrow_aman values

(1,1,201, 'anil', 'vrce', 1000), (2,3,206, 'mehul', 'ajni', 5000),

(5,2,311,'sunil','dharampeth',3000),(7,5,321,'madhuri','andheri',2000),

(8,6,375, 'pramod', 'virar', 8000), (9,9,481, 'kranti', 'nehruplace', 3000);

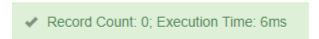
Questions:

1. Give name of customers having living city bombay and branch city nagpur.

Query: select t3.cname

from deposit_aman as t1, branch_aman as t2, customers_aman as t3
where t3.city='bombay' and t2.city='nagpur' and t1.c_id=t3.c_id and t1.b_id=t2.b_id

Output:

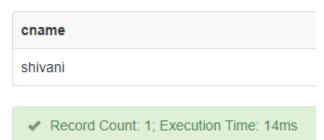


2. Give names of customers having the same living city as their branch city.

Query: select t1.cname

from customers_aman as t1, deposit_aman as t2, branch_aman as t3
where t1.cname = t2.cname and t2.bname=t3.bname and t1.city=t3.city

Output:

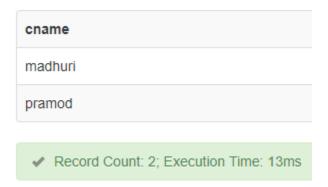


3. Give names of customers who are borrowers as well as depositors and having living city nagpur.

Query: select t1.cname

from customers_aman as t1, deposit_aman as t2, borrow_aman as t3 where t1.city='nagpur' and t1.c_id=t2.c_id and t2.c_id=t3.c_id

Output:



4. Give names of customers who are depositors and have the same branch city as that of sunil.

```
Query: select t1.cname
    from deposit_aman as t1 join branch_aman as t2
    on t1.bname=t2.bname
    where t2.city =
        (
            select b.city from branch_aman as b where b.bname =
            (
                 select d.bname from deposit_aman as d where d.cname='sunil'
            )
        )
```

Output:



✓ Record Count: 2; Execution Time: 12ms

5. Give names of depositors having the same living city as that of Anil and having deposit amount greater than 2000.

Query: select t1.cname

```
from deposit_aman as t1

inner join customers_aman as t2

on t2.cname=t1.cname

where t1.amount>2000 and t2.city in

(

select c.city from customers_aman as c where c.cname='anil'
)
```

Output:

```
✓ Record Count: 0; Execution Time: 11ms
```

6. Give names of depositors giving the same branch as the branch of sunil.

```
Query: select d.cname
from
(
     select t1.bname from deposit_aman as t1 WHERE t1.cname='sunil'
     ) as t2,
     deposit_aman as d
     where t2.bname=d.bname and d.cname<>'sunil'
```

Output:

```
✓ Record Count: 0; Execution Time: 12ms
```

7. Give names of borrowers having loan amount greater than the loan amount of Pramod.

where b.amount>t1.amount and t1.cname<>'pramod'

Output:

```
✓ Record Count: 0; Execution Time: 6ms
```

8. Give names of customers living in the city where branch of depositor sunil is located.

```
Query: select cs.cname from customers_aman as cs inner join

(
    select city as branch_city from branch_aman inner join
    (
        select bname from deposit_aman where cname='sunil'
    )as t1
    on t1.bname=branch_aman.bname
)as t2
on cs.city=t2.branch_city
```

Output:

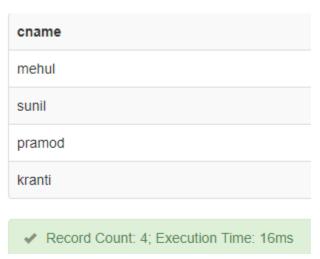




9. Give names of borrowers having deposit amount greater than 1000 and loan amount greater than 2000.

```
) as common where common.deposit>1000 and common.loan>2000
```

Output:



10. Give LOANNO and LOAN AMOUNT of borrowers having the same branch as that of Sunil.

```
Query: select b.loanno, b.amount
    from borrow_aman as b,
    (
        select bname from borrow_aman where cname='sunil'
    )as t1
    where t1.bname=b.bname and b.cname<>'sunil'
```

Output:

```
✓ Record Count: 0; Execution Time: 15ms
```

11. Give LOANNO, LOAN AMOUNT, and ACCOUNT NO AND DEPOSIT AMOUNT of customers living in city NAGPUR.

```
Query: select t1.actno, t1.amount as deposit_amount, t2.loanno, t2.amount as loan_amount from deposit_aman as t1, borrow_aman as t2, customers_aman as t3 where t1.cname=t3.cname and t1.cname=t2.cname and t3.city='nagpur'
```

Output:

actno	deposit_amount	Ioanno	loan_amount
104	1200	321	2000
105	3000	375	8000

```
Record Count: 2; Execution Time: 14ms + View Execution Plan Ink
```

12. Give LOANNO, LOAN AMOUNT, ACCOUNT NO and DEPOSITAMOUNT of customers having branch located in bombay.

Query: select t1.cname, t2.cname, t1.actno, t1.amount as deposit_amount, t2.loanno,

```
t2.amount as loan_amount

from deposit_aman as t1, borrow_aman as t2

where t1.bname=t2.bname and t1.bname in

(

select b.bname from branch_aman as b where b.city='bombay'
)
```

Output:

cname	cname	actno	deposit_amount	Ioanno	loan_amount
Sandip	madhuri	106	2000	321	2000
Shivani	pramod	107	1000	375	8000

```
✓ Record Count: 2; Execution Time: 21ms 

+ View Execution Plan 

✓ link
```

13. Give LOANNO, LOAN AMOUNT, ACCOUNT NO, DEPOSIT AMOUNT, BRANCH NAME, BRANCH CITY and LIVING CITY of Pramod.

Query: select t1.loanno, t1.amount as loan_amount, t2.actno, t2.amount as deposit_amount, t3.bname, t3.city as branch_city, t4.city as living_city

from borrow_aman as t1, deposit_aman as t2, branch_aman as t3, customers_aman as t4

where t4.cname='pramod' and t2.cname=t4.cname and t1.cname=t2.cname and

Output:

t2.bname=t3.bname

Ioanno	loan_amount	actno	deposit_amount	bname	branch_city	living_city
375	8000	105	3000	m.g.road	banglore	nagpur

```
✓ Record Count: 1; Execution Time: 7ms + View Execution Plan → link
```

14. Give deposit details and loan details of customers in the city where Pramod is living.

```
Query: select t1.actno, t1.cname, t1.bname, t1.amount, t1.adate, t2.loanno, t2.cname, t2.bname, t2.amount

from deposit_aman as t1, borrow_aman as t2, customers_aman as t3

where t3.cname=t1.cname and t1.cname=t2.cname and t3.city in

(

select c.city from customers_aman as c where c.cname='pramod'
```

Output:

actno	cname	bname	amount	adate	Ioanno	cname	bname	amount
104	Madhuri	chandnichowk	1200	1995-12-17	321	madhuri	andheri	2000
105	Pramod	m.g.road	3000	1996-03-27	375	pramod	virar	8000

```
✓ Record Count: 2; Execution Time: 61ms + View Execution Plan → link
```

15. Give names of depositors having the same branch city as that of sunil and having the same living city as that of Anil.

```
Query: select t1.cname
```

```
from deposit_aman as t1, customers_aman as t2, branch_aman as t3
where t1.c_id=t2.c_id and t1.b_id=t3.b_id and t3.city in

(
    select b.city from branch_aman as b, deposit_aman as d where cname='sunil' and d.b_id=b.b_id
)
and t2.city in
```

```
(
  select cs.city from customers_aman as cs where cs.cname='anil'
)
```

Output:



16. Give names of depositors having amount greater than 5000 and having the same living city as Pramod.

Query: select t1.cname

from deposit_aman as t1,customers_aman as t2

where t2.cname='pramod' and t1.c_id=t2.c_id and t1.amount>5000

Output:

```
✓ Record Count: 0; Execution Time: 12ms
```

17. Give city of customers having the same branch city as that of pramod.

Query: select t1.city

from customers_aman as t1, deposit_aman as t2, branch_aman as t3 where t2.b_id=t3.b_id and t2.cname='pramod' and t1.cname=t2.cname

Output:



18. Give branch city and living city of pramod.

Query: select t1.cname,t2.city as branch_city, t3.city as living_city

from deposit_aman as t1,branch_aman as t2, customers_aman as t3 where t3.cname='pramod' and t3.c_id=t1.c_id and t1.b_id=t2.b_id

Output:

cname	branch_cit	у	living_city
Pramod	banglore		nagpur
✓ Record Count: 1; Execution Time: 7ms	+ View Execution Plan	→ link	

19. Give branch city of sunil and branch city of anil.

Query: select t1.cname,t2.city as branch_city

from deposit_aman as t1,branch_aman as t2

where t1.bname=t2.bname and t1.cname in('anil','sunil')

Output:

cname			branch_city
Anil			nagpur
Sunil			nagpur
✓ Record Count: 2; Execution Time: 10ms	+ View Execution Plan	→ link	

20. Give the living city of Ashok and the living city of ajay.

Query: select t1.city as living_city

from customers_aman as t1

where t1.cname='ashok' and t1.cname='ajay'

Output:

✓ Record Count: 0; Execution Time: 8ms