

DBMS TEST QUESTIONS

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:

✓ Record Count: 0; Execution Time: 6ms

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:

cname
shivani

✓ Record Count: 1; Execution Time: 14ms

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:

cname
madhuri
pramod

✓ Record Count: 2; Execution Time: 13ms

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:

cname
Anil
Sunil

✓ 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.

Query: from borrow_aman as b,

```

(

    select cname,amount from borrow_aman where cname = 'pramod'

) as t1

```

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:

cname
madhuri
pramod

✓ Record Count: 2; Execution Time: 17ms

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

Query: select common.cname
from
(
select t1.cname,t1.amount as deposit,t2.amount as loan from borrow_aman as t1
inner join deposit_aman as t2 on t1.c_id=t2.c_id

) as common

where common.deposit>1000 and common.loan>2000

Output:

cname
mehul
sunil
pramod
kranti

✓ Record Count: 4; Execution Time: 16ms

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

Query: select b.loan, b.amount

from borrow_aman as b,

(

select bname from borrow_aman where bname='sunil'

)as t1

where t1.bname=b.bname and b.bname<>'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.loan, 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	loanno	loan_amount
104	1200	321	2000
105	3000	375	8000

✓ Record Count: 2; Execution Time: 14ms [+ View Execution Plan](#) [link](#)

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	loanno	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
t2.bname=t3.bname

Output:

loanno	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	loanno	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:

cname
Anil

✓ Record Count: 1; Execution Time: 50ms

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:

city
nagpur

✓ Record Count: 1; Execution Time: 15ms

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_city	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