

-| |ANUDIP LAB WORK| |-

Create Customer Table:-

Field	Type	Null	Key	Default	Extra
custid	varchar(6)	NO	PRI	NULL	
fname	varchar(30)	YES		NULL	
mname	varchar(30)	YES		NULL	
ltname	varchar(30)	YES		NULL	
city	varchar(15)	YES		NULL	
mobilen	varchar(10)	YES		NULL	
occupation	varchar(10)	YES		NULL	
dob	date	YES		NULL	

Insert Values in Customer Table:-

custid	fname	mname	ltname	city	mobilen	occupation	dob
C00001	Ramesh	Chandra	Sharma	Delhi	9543198345	Service	1976-12-06
C00002	Avinash	Sunder	Minha	Delhi	9876532109	Service	1974-10-16
C00003	Rahul	NULL	Rastogi	Delhi	9765178901	Student	1981-09-26
C00004	Parul	NULL	Gandhi	Delhi	9876532109	Housewife	1976-11-03
C00005	Naveen	Chandra	Aedekar	Mumbai	8976523190	Service	1976-09-19
C00006	Chitresh	NULL	Barwe	Mumbai	7651298321	Student	1992-11-06
C00007	Amit	Kumar	Borkar	Mumbai	9875189761	Student	1981-09-06
C00008	Nisha	NULL	Damle	Mumbai	7954198761	Service	1975-12-03
C00009	Abhishek	NULL	Dutta	Kolkata	9856198761	Service	1973-05-22
C00010	Shankar	NULL	Nair	Chennai	8765489076	Service	1976-07-12

Create Branch Table:-

Field	Type	Null	Key	Default	Extra
bid	varchar(6)	NO	PRI	NULL	
bname	varchar(30)	YES		NULL	
bcity	varchar(30)	YES		NULL	

Insert Values in Branch Table:-

bid	bname	bcity
B00001	Asaf ali road	Delhi
B00002	New delhi main branch	Delhi
B00003	Delhi cantt	Delhi
B00004	Jasola	Delhi
B00005	Mahim	Mumbai
B00006	Vile parle	Mumbai
B00007	Mandvi	Mumbai
B00008	Jadavpur	Kolkata
B00009	Kodambakkam	Chennai

Create Account Table:-

Field	Type	Null	Key	Default	Extra
acnumber	varchar(6)	NO	PRI	NULL	
custid	varchar(6)	YES	MUL	NULL	
bid	varchar(6)	YES	MUL	NULL	
opening_balance	int	YES		NULL	
aod	date	YES		NULL	
atype	varchar(10)	YES		NULL	
astatus	varchar(10)	YES		NULL	

Insert Values in Account Table:-

acnumber	custid	bid	opening_balance	aod	atype	astatus
A00001	C00001	B00001	1000	2012-12-15	Saving	Active
A00002	C00002	B00001	1000	2012-06-12	Saving	Active
A00003	C00003	B00002	1000	2012-05-17	Saving	Active
A00004	C00002	B00005	1000	2013-01-27	Saving	Active
A00005	C00006	B00006	1000	2012-12-17	Saving	Active
A00006	C00007	B00007	1000	2010-08-12	Saving	Suspended
A00007	C00007	B00001	1000	2012-10-02	Saving	Active
A00008	C00001	B00003	1000	2009-11-09	Saving	Terminated
A00009	C00003	B00007	1000	2008-11-30	Saving	Terminated
A00010	C00004	B00002	1000	2013-03-01	Saving	Active

+-----+-----+-----+-----+-----+-----+

Create Trandetails Tab:-

+-----+-----+-----+-----+-----+-----+

Field	Type	Null	Key	Default	Extra
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+-----+-----+-----+-----+-----+-----+

tnumber	varchar(6)	NO	PRI	NULL	
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acnumber	varchar(6)	YES	MUL	NULL	
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dot	date	YES		NULL	
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medium_of_transaction	varchar(20)	YES		NULL	
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transaction_type	varchar(20)	YES		NULL	
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transaction_amount	int	YES		NULL	
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Insert Values in Trandetails Table:-

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tnumber	acnumber	dot	medium_of_transaction	transaction_type	transaction_amount
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+-----+-----+-----+-----+-----+-----+

T00001	A00001	2013-01-01	Cheque	Deposit	2000
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T00002	A00001	2013-02-01	Cash	Withdrawal	1000
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T00003	A00002	2013-01-01	Cash	Deposit	2000
--------	--------	------------	------	---------	------

T00004	A00002	2013-02-01	Cash	Deposit	3000
--------	--------	------------	------	---------	------

T00005	A00007	2013-01-11	Cash	Deposit	7000
--------	--------	------------	------	---------	------

T00006	A00007	2013-01-13	Cash	Deposit	9000
--------	--------	------------	------	---------	------

T00007	A00001	2013-03-13	Cash	Deposit	4000
--------	--------	------------	------	---------	------

T00008	A00001	2013-03-14	Cheque	Deposit	3000
--------	--------	------------	--------	---------	------

T00009	A00001	2013-03-21	Cash	Withdrawal	9000
--------	--------	------------	------	------------	------

T00010	A00001	2013-03-22	Cash	Withdrawal	2000
--------	--------	------------	------	------------	------

T00011	A00002	2013-03-25	Cash	Withdrawal	7000
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T00012	A00007	2013-03-26	Cash	Withdrawal	2000
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+-----+-----+-----+-----+-----+-----+

Create Loan Table:-

+-----+-----+-----+-----+-----+

Field	Type	Null	Key	Default	Extra
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+-----+-----+-----+-----+-----+

custid	varchar(6)	NO	PRI	NULL	
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bid	varchar(6)	NO	PRI	NULL	
-----	------------	----	-----	------	--

loan_amount	int	YES		NULL	
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+-----+-----+-----+-----+-----+

Insert Values in Loan Table:-

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custid	bid	loan_amount
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+-----+-----+-----+

C00001	B00001	100000
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C00001	B00003	600000
--------	--------	--------

C00002	B00001	600000
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C00002	B00002	200000
--------	--------	--------

C00009	B00008	400000
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C00010	B00009	500000
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Problem #1:

Write a query to display the customer number , firstname, customer's date of birth . Display in a sorted order of date of birth year and within that sort by firstname.

Query: SELECT custid, fname, dob FROM customer ORDER BY YEAR(dob), fname;

custid	fname	dob
C00009	Abhishek	1973-05-22
C00002	Avinash	1974-10-16
C00008	Nisha	1975-12-03
C00005	Naveen	1976-09-19
C00004	Parul	1976-11-03
C00001	Ramesh	1976-12-06
C00010	Shankar	1976-07-12
C00007	Amit	1981-09-06
C00003	Rahul	1981-09-26
C00006	Chitresh	1992-11-06

Problem #2:

Write a query to display customer's number, first name and middle name. The customer's who don't have middle name, for them display the last name. Give the alias name as Cust_Name.

Query:- SELECT custid, fname, COALESCE(mname, lname) AS Cust_Name FROM customer;

```
+-----+-----+-----+
| custid | fname  | Cust_Name |
+-----+-----+-----+
| C00001 | Ramesh | Chandra   |
| C00002 | Avinash | Sunder   |
| C00003 | Rahul  | Rastogi   |
| C00004 | Parul  | Gandhi    |
| C00005 | Naveen | Chandra   |
| C00006 | Chitresh | Barwe    |
| C00007 | Amit   | Kumar     |
| C00008 | Nisha  | Damle     |
| C00009 | Abhishek | Dutta    |
| C00010 | Shankar | Nair      |
+-----+-----+-----+
```

Problem#3:

Write a query to display account number, customer's number, customer's firstname, lastname, account opening date.

Query:- SELECT a.acnumber, a.custid, c.fname AS customer_firstname, c.lname AS customer_lastname, a.aod AS account_opening_date FROM account a JOIN customer c ON a.custid = c.custid;

```
+-----+-----+-----+-----+-----+-----+
```

acnumber	custid	customer_firstname	customer_lastname	account_opening_date
A00001	C00001	Ramesh	Sharma	2012-12-15
A00002	C00002	Avinash	Minha	2012-06-12
A00003	C00003	Rahul	Rastogi	2012-05-17
A00004	C00002	Avinash	Minha	2013-01-27
A00005	C00006	Chitresh	Barwe	2012-12-17
A00006	C00007	Amit	Borkar	2010-08-12
A00007	C00007	Amit	Borkar	2012-10-02
A00008	C00001	Ramesh	Sharma	2009-11-09
A00009	C00003	Rahul	Rastogi	2008-11-30
A00010	C00004	Parul	Gandhi	2013-03-01

Problem # 4:

Write a query to display the number of customer's from Delhi. Give the count an alias name of Cust_Count.

Query:- SELECT COUNT(*) AS Cust_Count FROM customer WHERE city = 'Delhi';

Cust_Count
4

Problem # 5:

Write a query to display the customer number, customer firstname, account number for the customer's whose accounts were created after 15th of any month.

Query:- select a.custid,c.fname,a.acnumber from account a,customer c where a.custid=c.custid and day(aod)>15;

```
+-----+-----+-----+
| custid | fname  | acnumber |
+-----+-----+-----+
| C00003 | Rahul  | A00003   |
| C00002 | Avinash | A00004   |
| C00006 | Chitresh | A00005   |
| C00003 | Rahul  | A00009   |
+-----+-----+-----+
```

Problem # 6:

Write a query to display the female customers firstname, city and account number who are not into business, service or studies.

Query:- SELECT c.custid, c.fname, c.city, a.acnumber FROM customer c LEFT JOIN account a ON c.custid = a.custid WHERE c.occupation NOT IN ('Business', 'Service', 'Student') OR c.occupation IS NULL;

```
+-----+-----+-----+-----+
| custid | fname | city  | acnumber |
+-----+-----+-----+-----+
| C00004 | Parul | Delhi | A00010   |
+-----+-----+-----+-----+
```

Problem # 7:

Write a query to display city name and count of branches in that city. Give the count of branches an alias name of Count_Branch.

Query:- select bcity,count(*) as Count_Branch from branch group by bcity;

```
+-----+-----+
```

bcity	Count_Branch
Delhi	4
Mumbai	3
Kolkata	1
Chennai	1

Problem # 8:

Write a query to display account id, customer's firstname, customer's lastname for the customer's whose account is Active.

Query:- select a.acnumber,c.custid,c.fname,c.lname from account a,customer c where a.custid=c.custid and astatus="active";

acnumber	custid	fname	lname
A00001	C00001	Ramesh	Sharma
A00002	C00002	Avinash	Minha
A00003	C00003	Rahul	Rastogi
A00004	C00002	Avinash	Minha
A00005	C00006	Chitresh	Barwe
A00007	C00007	Amit	Borkar
A00010	C00004	Parul	Gandhi

Problem # 9:

Write a query to display the customer's number, customer's firstname, branch id and loan amount for people who have taken loans.

Query:- select l.custid,l.bid,l.loan_amount,c.fname from loan l,customer c where c.custid=l.custid;

custid	bid	loan_amount	fname
C00001	B00001	100000	Ramesh
C00001	B00003	600000	Ramesh
C00002	B00001	600000	Avinash
C00002	B00002	200000	Avinash
C00009	B00008	400000	Abhishek
C00010	B00009	500000	Shankar

Problem # 10:

Write a query to display customer number, customer name, account number where the account status is terminated.

Query:- select a.custid,a.acnumber,c.fname from account a,customer c where a.custid=c.custid and astatus="terminated";

custid	acnumber	fname
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+-----+-----+-----+

| C00001 | A00008 | Ramesh |

| C00003 | A00009 | Rahul |

+-----+-----+-----+

ER Diagram:-

