

# Introduction to Databases (CSE 3151)

## ASSIGNMENT 5: SUBQUERIES AND JOINS

1. Write the expression for the following set of queries in SQL, based on the set of schemas of Assignment (4), using concept of sub query.

a) Find out the name, phone\_no and cust\_no of customer having Account\_no “A0004”.

Ans-

name	phone_no	cust_no
abc Filter...	abc Filter...	abc Filter...
RAJ ANAND SINGH	9861258466	C0001
ANKITA SINGH	9879958651	C0002
SOUMYA JHA	9885623344	C0003
ABHIJIT MISHRA	9455845425	C0004
YASH SARAF	9665854585	C0005
SWAROOP RAY	9437855466	C0006
SURYA NARAYAN PR...	9937955212	C0007
PRANAV PRAVEEN	9336652441	C0008
STUTI MISRA	7870266534	C0009
ASLESHA TIWARI	NULL	C0010

b) Find out the name of the customer who has not taken any loan.

Ans-

name
abc Filter...
SOUMYA JHA
ABHIJIT MISHRA
SWAROOP RAY
SURYA NARAYAN PRA...

c) Find out the account\_no and Balance of customer with cust\_no = “C0010”.

Ans-

ACCOUNT_NO	BALANCE
abc Filter...	abc Filter...
A0006	550000

d) Find out the branch\_city where “ASLESHA TIWARI” has taken a loan.

Ans-

BRANCH_CITY
abc Filter...
MUMBAI

e) Find out the installment details of customer named “ANKITA SINGH”.

Ans-

INST_NO	LOAN_NO	INST_AMOUNT
abc Filter...	abc Filter...	abc Filter...
1	L0003	50000
2	L0003	50000

f) Find out the branch name and branch city, in which “ABHIJIT MISHRA” has an account.

Ans-

BRANCH_NAME	BRANCH_CITY
abc Filter...	abc Filter...
JUHU BRANCH	MUMBAI
CHANDNICHOWK B...	DELHI

g) Create a table named ACCOUNT\_TYPE from ACCOUNT table with two columns named as ACCOUNT\_NO and TYPE without taking any records from ACCOUNT table.

Ans-

Output- No output as it only created the record

h) Insert the account no and type from ACCOUNT table into the ACCOUNT\_TYPE table whose balance is less than 50000.

Ans-

Output- No output as it only updated the record

i) UPDTAE the account type to FD in ACCOUNT\_TYPE table for the customer with CUST\_NO equal to C0007.

Ans-

Output - No output as it only updated the record

j) Delete from ACCOUNT\_TYPE table the details of account whose balance is less than 20000.

Ans-

Output- No output as it only deleted the record.

k) Find out the account\_no that has greater balance than some accounts of type FD. (Use >some clause)

Ans-

ACCOUNT_NO
abc Filter...
A0001
A0003
A0004
A0006
A0007
A0010

l) Find out the account\_no that has greater balance than all accounts of type FD. (Use >all clause)

Ans-

ACCOUNT_NO
abc Filter...
A0003

m) Display the details of the branch in which some loans are taken. (Use exist clause)

Ans-

BRANCH_CODE	BRANCH_NAME	BRANCH_CITY
abc Filter...	abc Filter...	abc Filter...
B004	ANDHERI BRANCH	MUMBAI
B005	SALT LAKE BRANCH	KOLKATA
B006	SRIRAMPURAM BRA...	CHENNAI

n) Display the details of the loan for which no installments are paid. (Use not exist clause).

Ans-

LOAN_NO	CUST_NO	AMOUNT	BRANCH_CODE
abc Filter...	abc Filter...	abc Filter...	abc Filter...
L0001	C0005	3000000	B006

o) Increase all accounts with balance over 80000 by 6%, and all other accounts receive 5%. (Use case statement)

Ans-

Output- No output as it only updated the record.

## 2. Write the expression for the following set of queries in SQL, based on the set of schemas of Assignment (4), using concept of join.

a) Find out the Loan\_nos where the loans are taken from any branch with branch\_city=MUMBAI.

Ans-

LOAN_NO
abc Filter...
L0003
L0004

b) Find the Type of the accounts available in any branch with branch\_city =DELHI.

Ans-

TYPE
abc Filter...
SB

c) Find out the Name and Ph\_no of customers who have account balance more than 100000.

Ans-

NAME	PHONE_NO
abc Filter...	abc Filter...
SOUMYA JHA	9885623344
ABHIJIT MISHRA	9455845425
SWAROOP RAY	9437855466
ASLESHA TIWARI	NULL

d) Find out Installment\_no and Installment amount of customer with Name= RAJ ANAND SINGH.  
Ans-

INST_NO	INST_AMOUNT
abc Filter...	abc Filter...
1	10000
2	10000
3	10000

e) Find out the Name of the customers who do not have account of Type=SB.  
Ans-

NAME
abc Filter...
RAJ ANAND SINGH
ANKITA SINGH
YASH SARAF
SWAROOP RAY
ASLESHA TIWARI

f) Find out the Name of the customers who have paid installments of Amount 50000 against his/her loan.  
Ans-

NAME
abc Filter...
ANKITA SINGH

g) Find out the Ph\_no of customers having account at branch with Branch\_name equal to SALT LAKE.  
Ans-

PHONE_NO
abc Filter...
9861258466
9879958651
NULL

h) Find out the Branch\_name and Branch\_city where customer with Name=ABHIJIT MISHRA has his account.

Ans-

BRANCH_NAME	BRANCH_CITY
abc Filter...	abc Filter...
JUHU BRANCH	MUMBAI
CHANDNICHOWK B...	DELHI

i) Find out the Types of account and the account Balance of customer with Name='SWAROOP RAY'.

Ans-

TYPE	BALANCE
abc Filter...	abc Filter...
CA	901000
CA	36750
FD	104940

j) Find all branch codes where the total balance is greater than the average of the total balance at all departments. (Use with clause)

Ans-

BRANCH_CODE
abc Filter...
B004
B005