**SELECT & JOINSs**

Use BANK related tables (created using schema creation scripts provided) for these assignment questions.

Write SELECT SQL statements to perform the following operations in the BANK database.

(Q1 to Q6: *2 Marks* each and Q7 & Q8: *4 marks* each)

1. Display phone no. and home address of all customers from outside ‘Karnataka’
2. Write a query to show account no, current amount, simple interest amount and the total amount for 6 months for each active SB account. (Take interest rate = 5%)
3. Show details of all high amt (> Rs. 10K) credit transactions other than RD payments.
4. How much simple interest would the ‘closed’ FD accounts have earned for their respective terms if the FD interest rate is 8.5%? Write a query to show account no, initial amount and the interest earned.
5. What is the total amount a given customer would have paid for his/her active RD account at the end of its term?
6. Show details (Id, name & designation) of employees and their respective managers.
7. Show details of active FD account as follows:

Account no, Customer full name, Age in yrs, FD start date, FD end date, Initial amount and Final amount (Calculate final amount using compound interest formula:

A = P (1 + R/100)\*\*n, where \*\* = to the power of , n = No. of years)

1. Form a text message to be sent to customer’s mobile whenever a transaction happens on his / her account, as below. (Values in the angled brackets should be fetched from the database):

“Your a/c <XXXXXX9999> is <CREDITed/DEBITed> with Rs. <9999.99> on <date & time>. Balance is Rs. <99,999.99>”

Answers:

1.

SELECT CUST\_ID,CUST\_PHONE ,CUST\_ADDR\_LINE1||' '||CUST\_ADDR\_LINE2||' '||CUST\_STATE AS HOME\_ADDRESS

FROM BANK\_CUST\_CONTACT

WHERE CUST\_STATE !='Karnataka'

AND CONTACT\_TYPE = 'HOME';

2.

|  |
| --- |
| SELECT ACCOUNT\_NO, CURR\_BAL\_AMT AS CURRENT\_AMT, 0.05\*CURR\_BAL\_AMT AS SIMPLE\_INTEREST\_AMOUNT, CURR\_BAL\_AMT+CURR\_BAL\_AMT\*0.05\*0.5 AS TOTAL\_AMT, ACC\_STATUS |
| FROM BANK\_SB\_ACCOUNT |
| WHERE ACC\_STATUS ='ACTIVE'; |

3.

|  |
| --- |
| SELECT \* FROM BANK\_TRANSACTION |
| WHERE TRANS\_AMT > 10000 |
| AND TRANS\_TYPE = 'CR' |
| AND SUBSTR(TRANS\_DESC,1,2) != 'RD'; |

4.

SELECT ACCOUNT\_NO, INITIAL\_AMT , INITIAL\_AMT\*0.085\*(FD\_TERM\_MNTH/12) AS INTEREST\_EARNED

FROM BANK\_FD\_ACCOUNT

WHERE ACC\_STATUS = 'Closed';

5.

SELECT RD\_CUST\_ID,ACCOUNT\_NO,ACC\_STATUS,RD\_TERM\_YRS,INSTALLMENT\_AMT,INSTALLMENT\_AMT\*12\*RD\_TERM\_YRS AS AMMOUNT\_PAID\_BY\_CUSTOMER

FROM BANK\_RD\_ACCOUNT

WHERE ACC\_STATUS ='Active';

6.

SELECT EMP.BANK\_EMP\_ID,EMP.EMP\_NAME,EMP.DESIGNATION,EMP.MANAGER\_ID,MAN.EMP\_NAME AS MANAGER\_NAME,MAN.DESIGNATION AS MANAGER\_DESIGNATION

FROM BANK\_EMPLOYEE EMP LEFT OUTER JOIN BANK\_EMPLOYEE MAN

ON EMP.MANAGER\_ID = MAN.BANK\_EMP\_ID

ORDER BY BANK\_EMP\_ID;

7.

SELECT BA.ACCOUNT\_NO,CU.CUST\_FNAME||' '||CU.INITIALS||' '||CU.CUST\_LNAME AS FULL\_NAME, ROUND((SYSDATE - CU.CUST\_DOB)/365, 2) AS CUSTOMER\_AGE\_YRS, BA.START\_DT AS FD\_START\_DT,ADD\_MONTHS( BA.START\_DT, BA.FD\_TERM\_MNTH) AS FD\_END\_DT,BA.INITIAL\_AMT,ROUND(BA.INITIAL\_AMT\*POWER((1+0.085),(BA.FD\_TERM\_MNTH/12)),2) AS FINAL\_AMOUNT

FROM BANK\_FD\_ACCOUNT BA INNER JOIN BANK\_CUSTOMER CU

ON BA.CUST\_ID = CU.CUST\_ID

WHERE ACC\_STATUS ='Active';

8.

SELECT 'Your A/C ' || LPAD(SUBSTR(tran.trans\_acc\_no,7,10),10,'X') || ' is ' || DECODE(tran.trans\_type,'CR','CREDITed','DB','DEBITed','Default')|| ' with Rs.'|| tran.trans\_amt || ' on ' || TO\_CHAR(tran.trans\_dt,'DD-MON-YYYY HH:MM:SS') || '. Balance is Rs.' || sb.curr\_bal\_amt ||'.'

FROM BANK\_TRANSACTION TRAN INNER JOIN BANK\_SB\_ACCOUNT SB

ON TRAN.TRANS\_ACC\_NO = SB.ACCOUNT\_NO;