作业三

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第一题答案为：

SELECT `ACCOUNT\_ID`, `AVAIL\_BALANCE`, `OPEN\_DATE`, `LAST\_ACTIVITY\_DATE`

FROM `account`

WHERE `AVAIL\_BALANCE`>=ALL(

SELECT `AVAIL\_BALANCE`

FROM `account`

)

第二题答案为：

SELECT **CONCAT**(e1.LAST\_NAME,e1.FIRST\_NAME)

FROM employee as e1, employee as e2

WHERE e1.SUPERIOR\_EMP\_ID=e2.EMP\_ID AND e1.DEPT\_ID!=e2.DEPT\_ID

第三题答案为：

SELECT NAME

FROM(

SELECT NAME,**AVG**(AVAIL\_BALANCE) AS AVERAGE

FROM(

SELECT \*

FROM ACCOUNT, BRANCH

WHERE OPEN\_BRANCH\_ID=BRANCH\_ID

) AS temp1

GROUP BY NAME

) AS temp2

WHERE AVERAGE>=ALL(

SELECT AVERAGE

FROM(

SELECT NAME,**AVG**(AVAIL\_BALANCE) AS AVERAGE

FROM(

SELECT \*

FROM ACCOUNT, BRANCH

WHERE OPEN\_BRANCH\_ID=BRANCH\_ID

) AS temp3

GROUP BY NAME

) AS temp4

)

第四题答案为：

SELECT code

FROM(

(SELECT ID\_NUMBER as code

FROM individual

WHERE ID\_NUMBER LIKE '3%')

UNION(

SELECT CREDIT\_CODE as code

FROM business

WHERE CREDIT\_CODE LIKE '1%'

)

) as temp

ORDER BY code ASC

LIMIT 3;

第五题答案为：

SELECT **CONCAT**(LAST\_NAME,FIRST\_NAME), TIMESTAMPDIFF(**YEAR**, BIRTH\_DATE, CURDATE()) AS age

FROM (individual NATURAL JOIN customer) JOIN account USING(CUST\_ID)

GROUP BY CUST\_ID

HAVING **COUNT**(\*)>=2

第六题答案为：

SELECT EMP\_ID

FROM(

SELECT \*

FROM employee, acc\_transaction

WHERE employee.EMP\_ID=acc\_transaction.TELLER\_EMP\_ID AND TIMESTAMPDIFF(**YEAR**, START\_DATE, CURDATE())>5

)as temp

GROUP BY EMP\_ID

HAVING **COUNT**(\*)>3

ORDER BY START\_DATE ASC;

第七题答案为：

SELECT distinct CUST\_ID

FROM account AS a

WHERE(

NOT EXISTS (

SELECT PRODUCT\_CD

FROM account AS a3

WHERE a3.CUST\_ID=3 AND a3.PRODUCT\_CD NOT IN(

SELECT PRODUCT\_CD

FROM account AS a4

WHERE a4.CUST\_ID=a.CUST\_ID)

)

)

第八题查询购买了编号为“3”的客户购买的产品完全相同的客户编号。输出属性包括 CUST\_ID。

答案为：

SELECT distinct CUST\_ID

FROM account AS a

WHERE(

NOT EXISTS (

SELECT PRODUCT\_CD

FROM account AS a1

WHERE a1.CUST\_ID=a.CUST\_ID AND a1.PRODUCT\_CD NOT IN(

SELECT PRODUCT\_CD

FROM account AS a2

WHERE a2.CUST\_ID=3)

)

AND NOT EXISTS (

SELECT PRODUCT\_CD

FROM account AS a3

WHERE a3.CUST\_ID=3 AND a3.PRODUCT\_CD NOT IN(

SELECT PRODUCT\_CD

FROM account AS a4

WHERE a4.CUST\_ID=a.CUST\_ID)

)

)

第九题请对2015年的交易历史进行报表汇总，具体查询输出要求为:首先对交易月份 (命名为month)和交易类型编码进行分组，接着对交易月份进行分组，最后输出 2015年销售总额。输出属性包括month，TXN\_TYPE\_CD，sum(销售总额)。

答案为：

SELECT **MONTH**, TXN\_TYPE\_CD, **SUM**(AMOUNT) AS SUM\_AMOUNT

FROM(

SELECT **CAST**(DATE\_FORMAT(TXN\_DATE, "%m") AS SIGNED) AS **MONTH**,TXN\_TYPE\_CD,AMOUNT

FROM acc\_transaction

WHERE TXN\_DATE LIKE "2015%"

) AS temp

GROUP BY **MONTH**,TXN\_TYPE\_CD

WITH ROLLUP

第十题答案为：

(SELECT **MONTH**, TXN\_TYPE\_CD, **SUM**(AMOUNT) AS SUM\_AMOUNT

FROM(

SELECT **CAST**(DATE\_FORMAT(TXN\_DATE, "%m") AS SIGNED) AS **MONTH**,TXN\_TYPE\_CD,AMOUNT

FROM acc\_transaction

WHERE TXN\_DATE LIKE "2015%"

) AS temp

GROUP BY **MONTH**,TXN\_TYPE\_CD

WITH ROLLUP)

UNION

(SELECT **MONTH**, TXN\_TYPE\_CD, **SUM**(AMOUNT) AS SUM\_AMOUNT

FROM(

SELECT **CAST**(DATE\_FORMAT(TXN\_DATE, "%m") AS SIGNED) AS **MONTH**,TXN\_TYPE\_CD,AMOUNT

FROM acc\_transaction

WHERE TXN\_DATE LIKE "2015%"

) AS temp

GROUP BY TXN\_TYPE\_CD,**MONTH**

WITH ROLLUP)