
DBMS II LAB 06 TASKS

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Note: Plagiarism will be severely penalized.

TASK DESCRIPTION

Suppose you are given the task to perform the automation of a large bank. The entities you are working with are as follows:

Accounts (Account_ID, Account_Type, Opening_Date, Customer_ID, Current_Balance)

Customers (Customer_ID, Name, DOB, Address, Reg_Branch)

Branch (Branch_ID, Branch_Name, Address)

Logs (Log_ID, Table_Name, Transaction_Name (INSERT or DELETE), By_Customer, Transaction_Date)

Now perform the following tasks:

Task 1

Account Number Format: TTBBBYYYYMMDD.XXXXXX

TT = Account type (10 for *Saving*, 11 for *Current*)

BBB = Branch code

YYYYMMDD = Year, Month, Date of DOB of customer

XXXXXX = Customer ID

Write a function that takes 3 IN parameters such as Branch Code, Account Type, Customer ID to fetch corresponding DOB. And it returns a number as the new Account No.

Task 2

Create a row level trigger that generates the account_id by using your function in Task 1 each time a customer creates a new account.

Task 3

Create a row level trigger that automatically creates an entry in the Logs table whenever an account is created or deleted.

USEFUL HELPER FUNCTIONS:

SUBSTR

The Oracle/PLSQL SUBSTR functions allows you to extract a substring from a string.

Syntax:

```
SUBSTR( string, start_position [, length ] )
```

Parameters or Arguments:

`string` - The source string.

`start_position` - The starting position for extraction. The first position in the string is always 1.

`length` - Optional. It is the number of characters to extract. If this parameter is omitted, the SUBSTR function will return the entire string.

TO_CHAR

The Oracle TO_CHAR() function converts a DATE or INTERVAL value to a string in a specified date format.

Syntax:

```
TO_CHAR( value [, date_format] [, nlsparam] )
```

Parameters or Arguments:

`value` - A number or date that will be converted to a string.

`date_format` - Optional. This is the format that will be used to convert value to a string.

`nlsparam`) - The nlsparam argument specifies the languages for names and abbreviations of day and month e.g., Monday, Mon, January, Jan, etc., in the result string.

The nlsparam argument has the following form:

```
'NLS_DATE_LANGUAGE = language'
```

This nlsparam argument is also optional. If you omit it, the TO_CHAR() function uses the default date language.

TO_NUMBER

Syntax:

```
TO_NUMBER( string )
```