Dt : 23/1/2025

faq:

define Procedure?

=>Procedure is a set-of-queries executed on database product and which will not return

any value.

(Procedure in SQL is NonReturn-Type)

=>Procedures are also known as Stored Procedures.

structure of Procedure:

create or replace procedure Procedure_name

(para_list) is

begin

query-1

query-2

...

end;

/

Types of Procedures:

=>According to JDBC,procedures are categorized into three types:

(i)IN-Parameter Procedures

(ii)OUT-Parameter Procedures

(iii)IN-OUT-Parameter Procedures

(i)IN-Parameter Procedures:

   =>The Procedures which take the data from Java-Program and send to Database product are

   known as IN-Parameter Procedures.

(ii)OUT-Parameter Procedures:

   =>The Procedures which take the data from Database product and send to Java-Program are

   known as OUT-Parameter Procedures.

(iii)IN-OUT-Parameter Procedures:

   =>The Procedures which perform both operations are known as IN-OUT-Parameter Procedures.

   ---

*imp

Creating and Executing Procedure(Stored Procedure):

step-1 : Create the following DB Tables

BankCustomer70(accno,name,bal,acctype)

CustAddress70(accno,city,state,pincode)

CustContact70(accno,mid,phno)

create table BankCustomer70(accno number(15),name varchar2(15),bal number(10,2),

acctype varchar2(15),primary key(accno));

create table CustAddress70(accno number(15),city varchar2(15),state varchar2(15),

pincode number(10),primary key(accno));

create table CustContact70(accno number(15),mid varchar2(25),phno number(15),

primary key(accno));

step-2 : Construct Procedure to insert Customer details

create or replace procedure CreateAccount70

(ano number,nm varchar2,bl number,atype varchar2,cty varchar2,st varchar2,pcode number,

md varchar2,pno number) is

begin

 insert into BankCustomer70 values(ano,nm,bl,atype);

 insert into CustAddress70 values(ano,cty,st,pcode);

 insert into CustContact70 values(ano,md,pno);

end;

/

step-3 : Construct JDBC application to execute procedure.

syntax:

CallableStatement cs = con.prepareCall

 ("{call CreateAccount70(?,?,?,?,?,?,?,?)}");

Program : DBCon8.java

```
package test;
import java.util.*;
import java.sql.*;
public class DBCon8 {
     public static void main(String[] args) {
       Scanner s = new Scanner(System.in);
```

```java
        try(s;){
          Class.forName("oracle.jdbc.driver.OracleDriver");
              Connection con = DriverManager.getConnection

("jdbc:oracle:thin:@localhost:1521:xe","system","tiger");
              CallableStatement cs = con.prepareCall
                        ("{call CreateAccount70(?,?,?,?,?,?,?,?,?)}");
              System.out.println("Enter the AccNo:");
              long accNo = Long.parseLong(s.nextLine());
              System.out.println("Enter the Cust-Name:");
        String name = s.nextLine();
        System.out.println("Enter the Cust-Bal:");
        float bal = Float.parseFloat(s.nextLine());
        System.out.println("Enter the Cust-AccType:");
        String accType = s.nextLine();
        System.out.println("Enter the Cust-City:");
        String city = s.nextLine();
        System.out.println("Enter the Cust-State:");
        String state = s.nextLine();
        System.out.println("Enter the Cust-PinCode:");
        int pinCode = Integer.parseInt(s.nextLine());
        System.out.println("Enter the Cust-MailId:");
        String mId = s.nextLine();
        System.out.println("Enter the Cust-PhoneNo:");
        long phNo = Long.parseLong(s.nextLine());

        //Loading data to CallableStatement Object
        cs.setLong(1, accNo);
        cs.setString(2, name);
        cs.setFloat(3, bal);
        cs.setString(4, accType);
        cs.setString(5, city);
        cs.setString(6, state);
        cs.setInt(7, pinCode);
        cs.setString(8, mId);
        cs.setLong(9, phNo);

        cs.execute();//Procedure Executed...
        System.out.println("Customer Account created Successfully....");
        }catch(Exception e) {
          e.printStackTrace();
        }
      }
}


o/p:

Enter the AccNo:
```

123456

Enter the Cust-Name:

Alex

Enter the Cust-Bal:

1000

Enter the Cust-AccType:

Savings

Enter the Cust-City:

Hyd

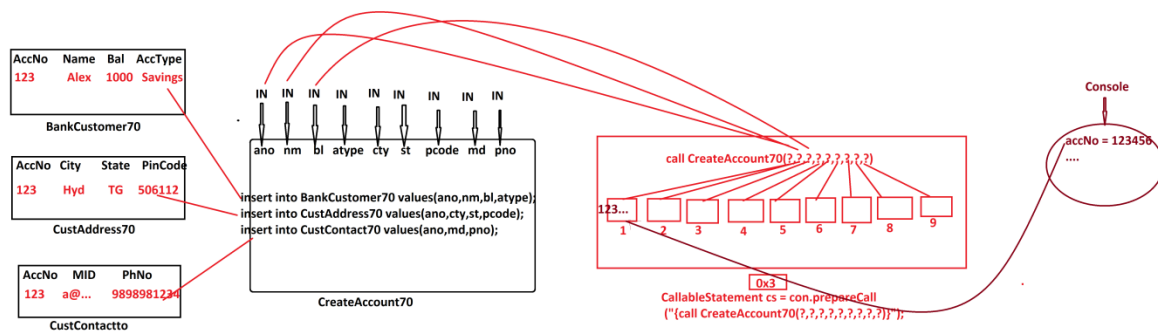*Enter the Cust-State:*

TG

Enter the Cust-PinCode:

506112

Enter the Cust-MailId:

a@gmail.com

Enter the Cust-PhoneNo:

9898981234

Customer Account created Successfully....

BankCustomer70

AccNo	Name	Bal	AccType
123	Alex	1000	Savings

CustAddress70

AccNo	City	State	PinCode
123	Hyd	TG	506112

CustContactto

AccNo	MID	PhNo
123	a@...	9898981234

IN IN IN IN IN IN IN IN IN

ano nm bl atype cty st pcode md pno

insert into BankCustomer70 values(ano,nm,bl,atype);
insert into CustAddress70 values(ano,cty,st,pcode);
insert into CustContact70 values(ano,md,pno);

CreateAccount70

call CreateAccount70(?,?,?,?,?,?,?,?,?)

123... 1 2 3 4 5 6 7 8 9

0x3

CallableStatement cs = con.prepareCall
("{call CreateAccount70(?,?,?,?,?,?,?,?,?)}");

Console

accNo = 123456
....

SQL> select * from BankCustomer70;

```
    ACCNO NAME            BAL ACCTYPE

---------- --------------- ---------- ---------------

    123456 Alex           1000 Savings
```

SQL> select * from CustAddress70;

```
    ACCNO CITY         STATE        PINCODE

---------- ------------------------------- ----------

    123456 Hyd          TG           506112
```

SQL> select * from CustContact70;

```
    ACCNO MID             PHNO

---------- ------------------------- ----------

    123456 a@gmail.com         9898981234
```

SQL>

Assignment:

step-1 : Create the following DB Tables

StuData70(rollno,name,branch)

StuAddress70(rollno,city,state,pincode)

StuContact70(rollno,mid,phno)

StuMarks70(rollno,sub1,sub2,sub3,sub4,sub5,sub6)

StuResult70(rollno,totmarks,per,result)

step-2 : Construct Procedure to insert Student details

step-3 : Construct JDBC Application to execute Procedure