Dt : 17/3/2025

Construct Application demonstrating Function in JDBC:

step-1 : Construct Function to retrieve Employee TotSal based in emp-Id

```
create or replace Function RetrieveTotSal72
(id varchar2) return number as ts number;
begin
  select totsal into ts from EmpSalary72 where eid=id;
  return ts;
end;
/
```

step-2 : Construct JDBC Application to execute function.

Program : DBCon13.java

```
package test;
import java.util.*;
import java.sql.*;
public class DBCon13 {
      public static void main(String[] args) {
        Scanner s = new Scanner(System.in);
        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 ?:=RetrieveTotSal72(?)}");
            System.out.println("Enter the Emp-Id to retrieve TotSal:");
            String eId = s.nextLine();
            cs.setString(2, eId);
            cs.registerOutParameter(1, Types.FLOAT);
```

```
            cs.execute();
            System.out.println("******Details******");
            System.out.println("Emp-Id:"+eId);
            System.out.println("TotSal:"+cs.getFloat(1));
            con.close();
        }catch(Exception e) {
          e.printStackTrace();
        }
      }
}
```

o/p:

Enter the Emp-Id to retrieve TotSal:

T121

*******Details*******

Emp-Id:T121

TotSal:114300.0

Assignment:

Construct and Execute Function to retrieve Student Percentage based on RollNo.

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faq:

define registerOutParameter()-method?

=>registerOutParameter()-method is from 'CallableStatement' and which specify the type of data recored(loaded) to the Parameter-Index-field of CallableStatement-Object

syntax:

cs.registerOutParameter(1,Types.FLOAT);

Note:

"Types" in JDBC is a class from java.sql package and which specify the SQL-TYPE used in registerOutParameter()-method

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**imp*

Transaction Management in JDBC:

define Transaction?

=>The set-of-statements which are executed on a single resource or multiple resources using ACID properties is known as Transaction.

A - Atomicity

C - Consistency

I - Isolation

D - Durability

A - Atomicity

=>The process in which the statements in Tranasction are executed at-a-time or not-at-all,is known as Atomicity.

C - Consistency

=>The process in which the selected state of resources remain same until the Transaction is complemented,is known as Consistency.

I - Isolation

=>The process in which multiple users are executed independently is known as Isolation.

D - Durability

=>The process in which recording the state of transaction and making it available for Customers,is known as Durability

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faq:

define Transaction Management?

=>The process of controlling the Transaction from starting to ending is known as Transaction Management.

=>We use the following methods in Transaction Management:

(a)getAutoCommit()

(b)setAutoCommit()

(c)setSavepoint()

(d)releaseSavepoint()

(e)commit()

(f)rollback()

Transaction : Booking Ticket using BookMyShow

1. Login Process
2. Region
3. Movie
4. Date
5. Show Time
6. No of Tickets
7. Availability
8. Select the Seats
9. Payment
   - (a)Card
   - (b)IB
   - (c)UPI
10. Conf....
    - (a)Mobile
    - (b)MailId
11. Logout