

Dt : 12/3/2025

Retrieving Stream(Image) from Database Product:

Program : DBCon10.java

```
package test;
import java.util.*;
import java.io.*;
import java.sql.*;
public class DBCon10 {
    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");
            PreparedStatement ps = con.prepareStatement
                ("select * from StreamTab72 where id=?");
            System.out.println("Enter the User-Id to retrive details:");
            String id = s.nextLine();
            ps.setString(1, id);
            ResultSet rs = ps.executeQuery();
            if(rs.next()) {
                Blob b = rs.getBlob(3);
                byte by[] = b.getBytes(1, (int)b.length());
                System.out.println("User-Id:"+rs.getString(1));
                System.out.println("User-Name:"+rs.getString(2));
                System.out.println("Enter the Lcation(fPath&fName-
destination) to store Stream: ");
                String path = s.nextLine();
                FileOutputStream fos = new FileOutputStream(path);
                fos.write(by);
                System.out.println("Stream stored to specified
Location....");
                fos.close();
            }else {
                System.out.println("Invalid User Id....");
            }
        }catch(Exception e) {
            e.printStackTrace();
        }
    }
}
```

o/p:

Enter the User-Id to retrieve details:

A121

User-Id:A121

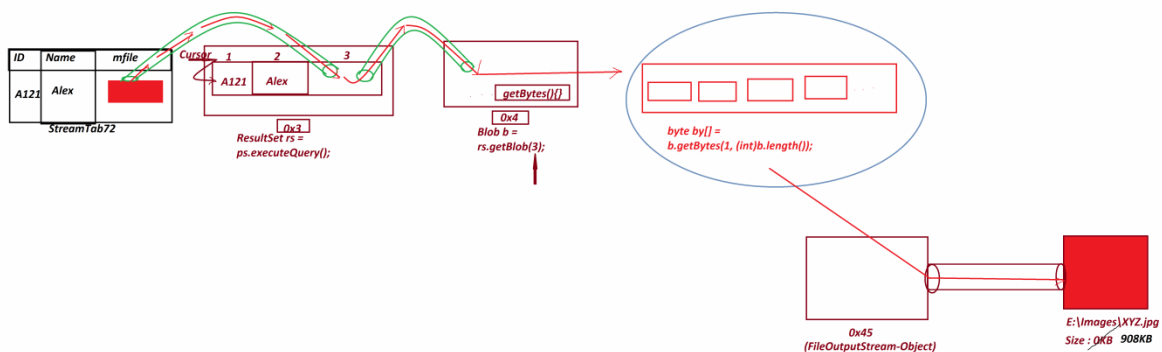
User-Name:Alex

Enter the location(fPath&fName-destination) to store Stream:

E:\Images\XYZ.jpg

Stream stored to specified location....

Diagram:



faq:

define 'FileInputStream'?

=>'FileInputStream' is a class from java.io package and which is instantiated to link(open)

the file to read Byte-Stream data.

syntax:

FileInputStream fis = new FileInputStream("fPath&fName");

faq:

define 'FileOutputStream'?

=>'FileOutputStream' is a class from java.io package and which is instantiated to create a new file with 0KB and links(opens) the file to write Byte-stream data.

syntax:

FileOutputStream fos = new FileOutputStream("fPath&fName");

faq:

define setBinaryStream() method?

=>setBinaryStream()-method belongs to PreparedStatement and which links stream to parameter-index-field of PreparedStatement Object.

=>Through this method we must specify para-index-no,location-of-stream and length-of-stream.

syntax:

ps.setBinaryStream(3, fis, f.length());

faq:

define getBlob() method?

=>getBlob()-method is from ResultSet and which is used to instantiate Blob-Interface and this Blob-Object internally linked to Stream-column of ResultSet.

syntax:

Blob b = rs.getBlob(3);

***imp**

faq:

define getBytes() method?

=>getBytes()-method is from Blob, and which is used to convert stream into byte-Array.

syntax:

byte by[] = b.getBytes(1, (int)b.length());

***imp**

CallableStatement:

=>'CallableStatement' is an interface from java.sql package and which is used to execute Procedures and Functions on Database product.

=>we use prepareCall()-method from 'Connection-interface' to create implementation Object for 'CallableStatement Interface', because the prepareCall()-method internally holding 'Anonymous Local InnerClass as implementation class of CallableStatement' and generate CallableStatement Object.

Method Signature of prepareCall():

public abstract java.sql.CallableStatement prepareCall(java.lang.String)
throws java.sql.SQLException;

syntax:

CallableStatement cs = con.prepareCall("{call Proce_name/Func_name}");
