

Dt : 5/10/2024(Day-10)

***imp**

Streams with Database product:

define stream?(Normal definition)

=>The contineous flow of data is known as stream.

Types of streams:

=>streams in java are categorized into two types:

1.Byte Stream(Binary Stream)

2.Character Stream

1.Byte Stream(Binary Stream):

**=>The contineous flow of data in the form of 8-bits is known as
Byte Stream or Binary Stream.**

**=>Through Byte Stream we can send all multi-media data files,
which means Text,Audio,Video,Image and Animation.**

2.Character Stream:

**=>The contineous flow of data in the form of 16-bits is known as
Character Stream.**

**=>Through Character Stream it is preferable to send only Text data
and not preferable for Audio,Video,Image and Animation.**

Note::

=>In realtime application development,we use only Byte Stream

=>we use the following sql-types to store stream data:

(a)BLOB

(b)CLOB

(a)BLOB:

**=>BLOB stands for 'Binary Large Object' and which is used to
store Byte Stream data or Binary Stream data.**

(b)CLOB:

**=>CLOB stands for 'Character Large Object' and which is used to
store Character Stream data.**

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Storing Stream data to Database Product:

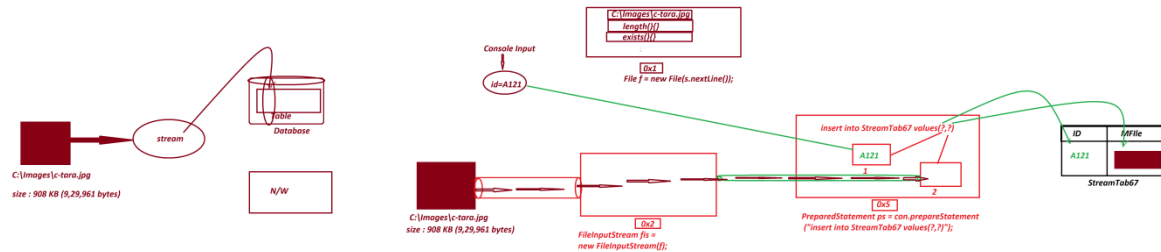
step-1 : Create table with name StreamTab67(id,mfile)

Primary Key : id

**create table StreamTab67(id varchar2(10),mfile BLOB,
primary key(id));**

step-2 : Construct JDBC Application to store Image to DB Product

Layout:



Program : DBCon6.java

```
package test;
import java.util.*;
import java.io.*;
import java.sql.*;
public class DBCon6
{

    public static void main(String[] args)
    {
        Scanner s = new Scanner(System.in);
        try(s){//Java9
        {
            Class.forName("oracle.jdbc.driver.OracleDriver");
            Connection con = DriverManager.getConnection
                ("jdbc:oracle:thin:@localhost:1521:xe",
                 "system", "tiger");
            PreparedStatement ps = con.prepareStatement
                ("insert into StreamTab67 values(?,?)");
            System.out.println("Enter the id to store image:");
            String id = s.nextLine();
            System.out.println("Enter the fPath&fName(Source-path)");
            File f = new File(s.nextLine());
            if(f.exists()) {
                FileInputStream fis = new FileInputStream(f);
                ps.setString(1, id);
                ps.setBinaryStream(2, fis, f.length());

                int k = ps.executeUpdate();
                if(k>0) {
                    System.out.println("Image stored Successfully....");
                }
            }else {
                System.out.println("Invalid fPath or fName...");
            }
            con.close();
        }
    }
}
```

```
        catch(Exception e)
        {
            System.out.println(e.toString());
        }
    }
}
```

o/p:

Enter the id to store image:

A121

Enter the fPath&fName(Source-path)

C:\Images\c-tara.jpg

Image stored Successfully....

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