

Dt : 11/3/2025

Assignmnet:

DB Table : Employee72(eid,ename,edesg,bsal,hra,da,totsal)

Primary Key : eid

Construct JDBC Application to perform the following Operations based on Choice:

- 1.AddEmployee
- 2.ViewAllEmployees
- 3.ViewEmployeeByCode
- 4.UpdateEmployeeById(bSal)
- 5.DeleteEmployeeById
- 6.Exit

Calcutions:

hra = 91% of bSal

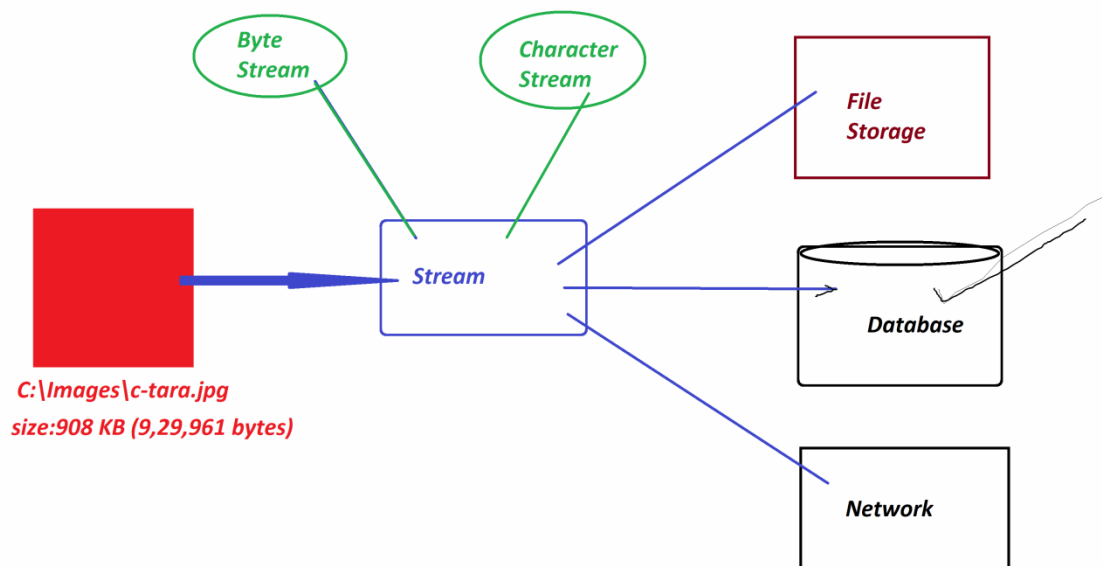
da = 63% of bSal

totSal = bSal+hra+da

Exception:

=>Min bSal must be 12000/-,else raise the exception

=====



***imp**

Streams with Database product:

define stream?(Normal definition)

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

Types of streams:

=>Java language support two types of streams:

1.Byte Stream(Binary Stream)

2.Character Stream

1.Byte Stream(Binary Stream):

=>The continuous 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 formats,which means Text,Audio, Video,Image and Animation.

2.Character Stream:

=>The Continuous flow of data in the form of 16-bits is known as Character Stream or Text Stream.

=>Character Stream is preferable for Text data,and which is not preferable for Audio, Video,Image and Animation data.

=>We use the following SQL-Types to store Stream data:

(a)BLOB

(b)CLOB

(a)BLOB:

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

(b)CLOB:

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

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Storing Stream data to Database product:

Step-1 : Create DB Table with name StreamTab72(id,name,mfile)

create table StreamTab72(id varchar2(10),name varchar2(15),mfile BLOB,primary key(id));

step-2 : Construct JDBC Application to store Image to Database product

Program : DBCon9.java

```
package test;
import java.util.*;
import java.io.*;
import java.sql.*;
public class DBCon9
{
    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
                ("insert into StreamTab72 values(?,?,?)");
            System.out.println("Enter the User-Id:");
            String id = s.nextLine();
            System.out.println("Enter the User-Name:");
            String name = s.nextLine();
            System.out.println("Enter the Location(fPath&fName) of User-
Image(Source)");
            String path = s.nextLine();
            File f = new File(path);
            if(f.exists()) {
                FileInputStream fis = new FileInputStream(path);
                ps.setString(1,id);
                ps.setString(2,name);
                ps.setBinaryStream(3, fis, f.length());
                int k = ps.executeUpdate();
                if(k>0) {
                    System.out.println("Image Stored Successfully...");
                }
                fis.close();
            }else {
                System.out.println("Invalid fPath or fName....");
            }
            con.close();
        }catch(Exception e) {
            e.printStackTrace();
        }
    }
}
```

}

o/p:

Enter the User-Id:

A121

Enter the User-Name:

Alex

Enter the Location(fPath&fName) of User-Image(Source)

C:\Images\c-tara.jpg

Image Stored Successfully...

Diagram:

