**Assignment 10**

**JBCD\_exception handling \_ string\_array\_collection, static method, oops concept.**

**1. make a database 'db\_bank'**

**2. Make a table in it 'tbl\_account'**

**3. Make a table in it 'tbl\_transaction' (accountnumber, transaction date, amount, transaction type, balance)**

**3. Java program to add a deatils of the account holder**

**method saveDetails(account number,name, age, address, opening balance ammount)**

**4. Transaction of bank account.**

**Method transaction(accountnumber , date, transaction type ,amount)**

**is deposit then add the amount and withdrawal will -minus the amount from the balance.**

**if balnce is less than withdrawal then send exception 'Please check the amount ! Low balance'**

**5. Printing the passbook**

**Method printData(account details and then transaction details);**

**print this data in one text file with account holder name ex: tom.txt**

**make a join query for this.**

**6. flush the account**

**method deleteAccount()**

**This will detele all your account details and transaction from the table**

**and delete the file from your folder also where it is save.**

**Used switch case and program will run till user press or type 'exit' command.**

**Do simple code dont make a code confusion.**

**Mark will be given on cleand and understanding code.**

**use comment on every line of code.**

**make code dependent so we can used it in any other project also.**

**Once completed commit in github.**

**Ans:**

**Import java.sql.\*;**

**import java.util.\*;**

**import java.io.\*;**

**public class jdbcex class**

**{**

**static final String JDBC\_DRIVER = "com.mysql.jdbc.Driver";**

**static final String DB\_URL = "jdbc:mysql://localhost:3306/db\_bank";**

**static final String USER = “root”;**

**static final String PASS = "";**

**public static void main(String[] args) System.out.println(“#@@@@@@@@@@@@BANK MANAGEMENT SYSTEM@@@@@@@@@@@@@@@@@@#”);**

**while(true)**

**{**

**System.out.println("1.create account.");**

**System.out.println("2.Transaction.");**

**System.out.println("3.printData");**

**System.out.println("4.Delete Account");**

**Scanner s=new Scanner("System.in");**

**System.out.println("Enter your choice");**

**int choice=s.nextInt();**

**switch(choice)**

**{**

**case 1:**

**System.out.println("Enter your account number");**

**int accno=s.nextInt();**

**System.out.println("Enter your name");**

**String name=s.nextLine();**

**System.out.println("Enter your age");**

**int age=a.nextInt();**

**System.out.println("Enter your address");**

**String address=s.nextLine(); System.out.println("Enter opening balance amount");**

**int opbalam=s.nextInt(); saveDetails(accno,name,age,address,opbalam); tbl\_account**

**break;**

**case 2:**

**System.out.println("Enter account no");**

**int accno2=s.nextInt();**

**System.out.println("Enter transaction date");**

**Stringdate=s.nextLine(); System.out.println("Enter amount");**

**int amount=s.nextInt(); System.out.println("Enter transaction type");**

**String trantype=s.nextLine(); System.out.println("Enter your account balance"); int balance1=s.nextInt(); try**

**{**

**transaction(accno2,date,amount,trantype,balance1);**

**transactions in tbl\_transaction**

**}**

**catch (Exception e)**

**{**

**e.printStackTrace();**

**}**

**break;**

**case 3:**

**printData();**

**break;**

**case 4:**

**deleteAccount();**

**break;**

**default:**

**System.out.println("Goodbye!");**

**}**

**}**

**}**

**public static void saveDetails(int accno,String name,int age,String address,int opbalam)**

**{**

**Try**

**{**

**Statement stmt=null;**

**Connection conn = null;**

**System.out.println("Connecting to a selected database...");**

**Conn2=DriverManager.getConnection(DB\_URL, USER, PASS);**

**System.out.println("Connected database successfully...");**

**Class.forName("com.mysql.jdbc.Driver");**

**stmt = conn.createStatement();**

**System.out.println("Inserting records into the table...");**

**String sql = "INSERT INTO tbl\_account VALUES(accno,name,age,address,opbalam)";**

**stmt.executeUpdate(sql);**

**System.out.println("Inserted records into the tbl\_account table...");**

**}**

**catch(SQLException se)**

**{**

**se.printStackTrace();**

**}**

**catch(Exception e)**

**{**

**e.printStackTrace();**

**}**

**System.out.println("Account Successfully creadted");**

**}**

**public static void transaction(int accno1,String date1,int amount,String trantype,int balance1) throws Exception**

**{**

**String test=null;**

**test.toString();**

**try**

**{**

**Statement stmt1 = null;**

**Connection conn3 = null;**

**System.out.println("Connecting to a selected database...");**

**conn3 = DriverManager.getConnection(DB\_URL, USER, PASS);**

**System.out.println("Connected database successfully...");**

**Class.forName("com.mysql.jdbc.Driver");**

**stmt1 = conn3.createStatement();**

**System.out.println("Inserting records into the table...");**

**String sql2="INSERT INTO `tbl\_transaction` VALUES(accno1,date1,amount, trantype, balance1)";**

**stmt1.executeUpdate(sql2);**

**System.out.println("Inserted records into the table...");**

**String str3="deposit";**

**//now this if-else checkes whether the trantype is deposit or withdraw if it is deposit then it adds the amount to the current balance**

**//and if it is withdraw then minus the amount from current balance**

**if(trantype.equals(str3))**

**{**

**balance1=balance1+amount; //adds the amount to balance(deposit)**

**}**

**else**

**{**

**balance1=balance1-amount;**

**if(balance1<amount)**

**{**

**throw new Exception("please check the ammount! Low balance");**

**}**

**}**

**sql2="UPDATE `tbl\_transaction` SET `balance`=balance1 WHERE 1";**

**stmt1.executeUpdate(sql2);**

**}**

**catch(SQLException se)**

**{**

**se.printStackTrace();**

**}**

**catch(Exception e)**

**{**

**e.printStackTrace();**

**}**

**System.out.println("Transaction Successfully done!");**

**}**

**public static void printData()**

**{**

**try**

**{**

**Connection conn5 = null;**

**Statement stmt5 = null;**

**Class.forName("com.mysql.jdbc.Driver");**

**System.out.println("Connecting to a selected database...");**

**conn5 = DriverManager.getConnection(DB\_URL, USER, PASS);**

**System.out.println("Connected database successfully...");**

**System.out.println("Creating statement...");**

**stmt5 = conn5.createStatement();**

**String sql5="SELECT accno,name,age,address,opbalam,date,trantype,amount from tbl\_account inner join tbl\_transaction on tbl\_account.accno=tbl\_transaction";**

**ResultSet rs = stmt5.executeQuery(sql5);**

**try**

**{**

**File obj = new File("jdbcfile.txt");**

**if (obj.createNewFile())**

**{**

**System.out.println("File created: " + obj.getName());**

**}**

**else**

**{**

**System.out.println("File already exists.");**

**}**

**rs.next();**

**Clob c=rs.getClob(2);**

**Reader r=c.getCharacterStream();**

**FileWriter fw=new FileWriter("jdbcfile.txt");**

**int i;**

**while((i=r.read())!=-1)**

**fw.write((char)i);**

**fw.close();**

**System.out.println("Successfully wrote to the file.");**

**}**

**catch (Exception e)**

**{**

**System.out.println("An error occurred.");**

**e.printStackTrace();**

**}**

**}**

**catch(Exception e)**

**{**

**}**

**}**

**defination starts here**

**public static void deleteAccount()**

**{**

**try**

**{**

**Statement stmt4 = null;**

**Connection conn1 = null;**

**System.out.println("Connecting to a selected database...");**

**Class.forName("com.mysql.jdbc.Driver");**

**conn1 = DriverManager.getConnection(DB\_URL, USER, PASS);**

**System.out.println("Connected database successfully...");**

**stmt4 = conn1.createStatement();**

**Scanner sn=new Scanner(System.in);**

**System.out.println("Do you really want to delete account? if yes enter account\_no");**

**int no=sn.nextInt();**

**String sql4="DELETE FROM `tbl\_transaction` WHERE accno=no";**

**stmt4.executeUpdate(sql4);**

**}**

**catch(SQLException se)**

**{**

**se.printStackTrace();**

**}**

**catch(Exception e)**

**{**

**e.printStackTrace();**

**}**

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