**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)**
4. **Java program to add a details of the account holder**

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

1. **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’**

1. **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.**

1. **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 don’t 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();

}