

PART B

2) Write a menu driven JDBC program to perform basic operations with Bank Table.

<p style="text-align: center;">MENU</p> <ol style="list-style-type: none">1. Add new Account Holder information.2. Amount Deposit3. Amount Withdrawal (Maintain minimum balance 500 Rs)4. Display all information5. Exit
--

Bank

ACC_NO	ACC_NAME	ACC_ADDRESS	BALANCE
--------	----------	-------------	---------

BankInfo.java

```
package bankinfo;
```

```
import java.sql.Connection;
```

```
import java.sql.DriverManager;
```

```
import java.sql.ResultSet;
```

```
import java.sql.SQLException;
```

```
import java.sql.Statement;
```

```
import java.util.Scanner;
```

```
import java.util.logging.Level;
```

```
import java.util.logging.Logger;
```

```

public class BankInfo
{
    public static void main(String[] args) {
        try {
            Scanner in=new Scanner(System.in);
            int choice=5;
            int acc_no;
            float bal;
            String name,address,sql;
            Class.forName("org.apache.derby.jdbc.ClientDriver");
            Connection
            con=DriverManager.getConnection("jdbc:derby://localhost:1527/Ba
            nk", "mani", "abcd1234");
            Statement stmt=con.createStatement();
            ResultSet rs;
            do{
                System.out.println("Transaction Menu");
                System.out.println("----- ");
                System.out.println("1.Add Account");
                System.out.println("2.Deposit");
                System.out.println("3.Withdraw");
                System.out.println("4.Display");
                System.out.println("5.Exit");
                System.out.println("----- ");
            }
        }
    }
}

```

```

System.out.print("Enter your choice: ");
choice=in.nextInt();
switch(choice){
    case 1:
        System.out.print("Enter the Account Number: ");
        acc_no=in.nextInt();
        in.nextLine();
        System.out.print("Enter the Account holder name: ");
        name=in.nextLine();
        System.out.print("Enter the address: ");
        address=in.nextLine();
        System.out.print("Enter the Initial amount: ");
        bal=in.nextFloat();

        sql="INSERT INTO BNKTABLE (ACC_NO, ACC_NAME, ACC_ADDRESS,
        BALANCE)VALUES ('+acc_no+", '"+name+"', '"+address+"', '"+bal+")";

        int result= stmt.executeUpdate(sql);
        if(result==1){
            System.out.println("Account details are saved");
        }else
        {
            System.out.println("Error! While saving Account details");
        }
        break;

```

case 2:

```
System.out.print("Enter the Account Number: ");
```

```
acc_no=in.nextInt();
```

```
sql="SELECT COUNT(*) FROM BNKTABLE WHERE ACC_NO="+acc_no;
```

```
rs=stmt.executeQuery(sql);
```

```
rs.next();
```

```
if(rs.getInt(1)==1){
```

```
System.out.print("Enter the amount to be deposit: ");
```

```
bal=in.nextFloat();
```

```
if(bal<=0){
```

```
System.out.println("Enter the proper amount"); break;
```

```
}
```

```
sql="UPDATE BNKTABLE SET BALANCE=BALANCE +" +bal+" WHERE  
ACC_NO="+acc_no;
```

```
if(stmt.executeUpdate(sql)==1){
```

```
System.out.println("Amount deposited successfully");
```

```
}
```

```
else
```

```
{
```

```
System.out.println("Error! While depositing the amount");
```

```
}
```

```
}
```

```
else{
```

```
System.out.println("Account number not found");
```

```

    }
    break;
case 3:
    System.out.print("Enter the Account Number: ");
    acc_no=in.nextInt();
    sql="SELECT COUNT(*) FROM BNKTABLE WHERE ACC_NO="+acc_no;
    rs=stmt.executeQuery(sql);
    rs.next();
    if(rs.getInt(1)==1){
        System.out.print("Enter the amount to be withdrawn: ");
        float w=in.nextFloat();
        if(w<=0){
            System.out.println("Enter the proper amount");
            break;
        }

        sql="UPDATE BNKTABLE SET BALANCE=BALANCE-"+w+" WHERE
        ACC_NO="+acc_no+"and BALANCE-"+w+">=500";

        int res= stmt.executeUpdate(sql);

        if(res==1){
            System.out.println("Amount debited successfully");
        }else{
            System.out.println("Cannot withdraw the amount-LOW
            BALANCE!!");
        }
    }
}

```

```

        else{
            System.out.println("Account number not found");
        }
        break;
    case 4:
        ResultSet res=stmt.executeQuery("SELECT * FROM BNKTABLE");
        System.out.println("\n\nAcc_no\t\t Name\t\t Address\tBalance ");
        System.out.println(" -----");
        while(res.next()){
            System.out.print((int) res.getInt(1) + "\t\t");
            System.out.print(res.getString(2) + "\t\t");
            System.out.print(res.getString(3) + "\t\t");
            System.out.print((float) res.getFloat(4) + "\t\t");
            System.out.print("\n");

        }
        break;

    case 5:
        stmt.close();
        con.close();
        System.out.println("thank you");
        return;
    default:

```

```

        System.out.println("Wrong choice .....\\nTry Again!");
    }

    }while(true);

    } catch (ClassNotFoundException ex) {

        Logger.getLogger(BankInfo.class.getName()).log(Level.SEVERE,
null, ex);

    }

}

}

```

Create Table

Table name: BnkTable

Key	Index	Null	Unique	Column name	Data type	Size
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	ACC_NO	INTEGER	0
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	ACC_NAME	VARCHAR	25
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	ACC_ADDRESS	VARCHAR	25
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	BALANCE	REAL	0

Buttons: Add column, Edit, Remove, Move Up, Move Down, OK, Cancel, Help

Output:

Transaction Menu

-
- 1.Add Account
 - 2.Deposit
 - 3.Withdraw
 - 4.Display
 - 5.Exit
-

Enter your choice: 1

Enter the Account Number: 10002

Enter the Account holder name: Bhavya

Enter the address: Udupi

Enter the Initial amount: 1000

Account details are saved

Transaction Menu

-
- 1.Add Account
 - 2.Deposit
 - 3.Withdraw
 - 4.Display
 - 5.Exit
-

Enter your choice: 4

Acc_no	Name	Address	Balance
1000	Nidhi	Kundapura	4000.0
10001	Kavya	Banglore	1000.0
10002	Bhavya	Udupi	1000.0

Transaction Menu

-
- 1.Add Account
 - 2.Deposit
 - 3.Withdraw
 - 4.Display
 - 5.Exit
-

Enter your choice: 2

Enter the Account Number: 10002

Enter the amount to be deposit: 2000

Amount deposited successfully

Transaction Menu

-
- 1.Add Account
 - 2.Deposit
 - 3.Withdraw
 - 4.Display
 - 5.Exit
-

Enter your choice: 4

Acc_no	Name	Address	Balance
1000	Nidhi	Kundapura	4000.0
10001	Kavya	Banglore	1000.0
10002	Bhavya	Udupi	3000.0

Transaction Menu

- 1.Add Account
- 2.Deposit
- 3.Withdraw
- 4.Display
- 5.Exit

Enter your choice: 3

Enter the Account Number: 10002

Enter the amount to be withdrawn: 2000

Amount debited successfully

Transaction Menu

- 1.Add Account
- 2.Deposit
- 3.Withdraw
- 4.Display
- 5.Exit

Enter your choice: 4

Acc_no	Name	Address	Balance
1000	Nidhi	Kundapura	4000.0
10001	Kavya	Banglore	1000.0
10002	Bhavya	Udupi	1000.0

Transaction Menu

- 1.Add Account
- 2.Deposit
- 3.Withdraw
- 4.Display
- 5.Exit

Enter your choice: 5

thank you