PAGE No:
DATE: / /

09/01/24

Lab - 05

Develop a java program to ds create class bank that maintains savings & current account. Accept deposit from customer and update the balance. Display the balance. Compute Interest

```
import java.util.Scanner;
class Account {
    String custName;
    long accNo;
    String accType;
    double balance;

public Account (String custName, long accNo,
    String accType, double balance){
        this.custName = custName;
        this.accNo = accNo;
        this.acctype = actype;
        this.balance = balance; }

public void deposit( double amount){
    balance += amount;
    System.out.println(" Deposit of $"+ amount+"
    successful. Updated balance: $"+balance);
    }
```

```
public void displayBalance() {
   System.out.println(" Account Balance: $"
      + balance); }

public void withdraw (double amount){
   System.out.println(" Withdrawal not
   supported for this acc type");}
}

class CurAccount extends Account {
   double Minbalance;
   double ServiceCharge;

 public CurAccount}( String custname; long
      accNo, double balance, double
      Minbalance, double service Charge){
    super(custName, accNo, "Current", balance)
    this.minBalance = Minbalance;
    this.serviceCharge = Service Charge;}
public void checkMinBalance() {
   if (balana < Minbalance){
     balance -= serviceCharge;
     System.out.println(" Minimum balance
        not maintained.
servia charge of -$" + serviceCharge + " imposed");
 displayBalance ();
 }
}
@Override
public void withdraw(double amount){
  iF (amount > balance){
    System.out.println (" Insufficient funds");
    }
  else
  balance-=.amount;
  System.out.println(" $-" + amount + " Withdraw
   updated balance: $" + balance);
   checkMinBalance ();
  }
}
}

class SavAccounts extends Accounts {
  double interestRate;
public SavAccount {custName, long accNo,
  double balance, double interestRate){
  super(custName, accNo, "savings", Balance);
  this. interestRate = interestRate);
```

```
public void computeInterest() {
    doubel interenest = balance* (intRate/100)
    balance += interest;
    System.out.println(" Interest &
     deposit " + inters);
    display Balance;
  }
 }
}

public class Bank {
      public static void main (String args[])
       Scanner s = new Scanner (System.in);

       System.out.println(" Name, ").
       string custName = s.newLine ~~custNam~~ ();

       Syst. out.println(" Enter intial amt");
       double IA = s.nextInt().

       System.out . println (" Enter acc Type ")
       Acc useraccount = null;
```

```
if (accountType= 1){
  Sys. pritnt(" Enter minum balan for
     current  account); s.
  minbalance = s. nextDouble();
 Sys. println= (" Enter service charge");
  servicecharge = s. NextDoulle();
  userAccount = new SavAccount(custName,
     intialAmout, interestRate);}
else {
   System. out. println ("Invalid tye Exit progr");
   s. close();
   return; }


int choice;
do {
   System. out. printlu (" Select \n")
   System. out. print(" 1. Deposit \n \2. Display
   Balance \n 3. compute Interest Savings
     only \n4. Withdraw \n 5. Exit \n
        Enter Choices");
  choice = ~~new~~ s. nextINt();
```

```
switch (choice) {
  case 1:
    System.out.printlh("Enter amount to
    deposit");
    double dep = s.nexDouble();
    userAcc.deposit(dep); break;
  case 2:
    userAcc.displaybalance();
    break;
  case 3:
    if(userAcc instanceof SavAccount){
    ((Savaccount)userAcc).computeInterest()
    else {       .out.
    System.println("Invalid opt for curr
       acc"); }; break;
  case 4:  System.out.printlh("Enter
     amt    to    withdraw");
    double withdraw Amount = S~~caaaa~~.nextDouble(); n
    userAccount.withdraw(withdrawAmount);
    break;
  case 5:  System.out.println("Exiting
     the    program"); break;
  default: System.out.println("Invalid
           choice"); }
} (while choice!=5);
```

~~sca~~
}
}

En
Elu
~~Ea~~

En
Ec

Se
1. £
2 ¢
3. C
5.
(

1.

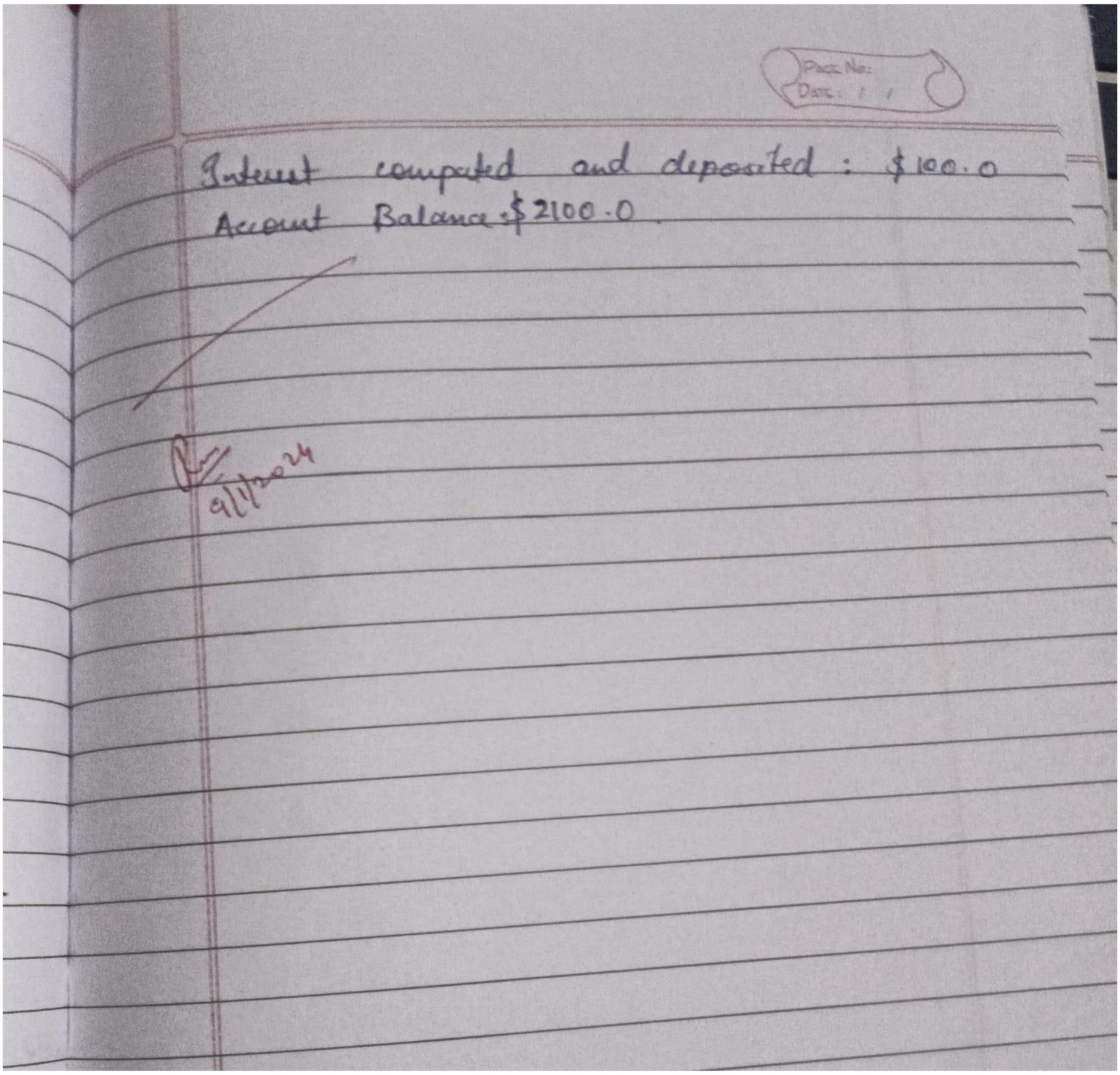
PAGE NO:
DATE: / /

```
~~Scanner~~ s.close().
  }
}
```

OUTPUT

```
Enter your name: Nidhi
Enter intial amount : 2000.
~~Enter~~ Select account type(1. current 2 Savings)
    : 1
Enter min balance for current acc: 200
Enter service charge for acc: 20

Select an option
1. Deposit
2. Display Balance
3. Compute Interest (Savings only)
4. Withdraw
5. Exit
Enter choice : 1
Enter amount to deposit =$1000.

Select an option
1. {" Internal choice again}
```

```
2
Account Balance:$3000

{Intenal choice} : 3
Invalid option for current account

{Internal choice} : 4
Enter amount to withdraw : 100

{Inter choice} : 5
Exiting the program.

Enter your name: Nidhi
Enter intial amount : 2000
Type of account (1. current 2. Savings):2
Enter interest rate : 5

Select an option:
1. Deposit
2. Display Balance
3. compute Interest
4. withdraw
5. Exit
Enter your choice : 3
```



Page No:
Date: / /

Interest computed and deposited : $100.0
Account Balance:$2100.0.

9/1/2024