Lab-5

```
import java.util.Scanner;
class Account
{
 String name;
 int accno;
 String type;
 double balance;

account ( String name, int accno, string type, double
 balance)
{
  this.name=name;
  this.accno = accno;
  this.type = type;
  this.balance = balance;
}
void deposit (double amount)
{
  balance += amount;
}
void withdraw (double amount)
{
  IF ((balance - amount) >= 0)
  {
   balance -= amount;
  }
  else
  {
   System.out.println ("Insufficient balance");
  }
```

```
void display()
{
System.out.println("name:"+name+" accno:"+accno+
"type:"+type+"balance"+balance);
}
class savAcct extends account
{
private savAcct static double rate=5;
savAcct(string name, int, accno, double, balance)
{
super(name, accno, "savings", balance);
}

void interest()
{
balance += balance*(rate)/100;
System.out.println("balance:"+balance);
}
class curAct extends account
{
private double minBal=500;
private double serviceCharges=50;

curAct(string name, int accno, double balance)
{
super(name, accno, "current", balance);
}
```

```
void checkmin()
{
  if(balance<minBal)
  {
    System.out.println("balance is less than min
    balance, service charges imposed :"+serviceCharges);
    balance -= serviceCharges;
    System.out.println("balance is "+ balance);
  }
}

class Bank accountmain
{
  public static void main (String a[])
  {
  Scanner s = new Scanner (System.in);
  System.out.println("enter the name:");
  String name = s.next();
  System.out.println("enter the type (current/savings)");
  String type = s.next();
  System.out.println("enter the account number");
  int accno = s.nextInt();
  System.out.println("enter the initial balance");
  double balance = s.nextDouble();
```

```
int ch;
double amount1, amount2;
account acc = new account (name, accno, type,
balance);
savAcct sa = new savAcct (name, accno, balance);
curAcct ca = new curAcct (name, accno, balance);
while (true)
{
 if (acc.type.equals ("savings"))
 {
  System.out.println ("In Menu \n1. deposit
  2. withdraw 3. computer 4. interest interest
  4. display");
  System.out.println (" Enter the choice");
  ch = s.nextInt()
  switch (ch)
  {
   case 1: System.out.println ("enter the
   amount");
   amount1 = s.nextInt();
   break;
   case 2: System.out.println ("enter the amount");
   amount2 = s.nextInt();
   break;
   case 3: sa.interest ();
   break;
   default: System.out.println ("Invalid input");
}
```

```
else
{
System.out.println("\n Menu 1. Deposit 2. withdraw
3. display");
System.out.println("enter the choice");
ch=s.nextInt();
}
switch(ch)
{
case 1: System.out.println("enter the amount");
amount1=s.nextInt();
break;
case 2: System.out.println("enter the amount");
amount2=s.nextInt();
break;
case 3: syst
ca.deposit(amount1);
break;
case 3: ca.display();
break;
case 4: System.exit(0);
default: System.out.println("Invalid input");
break;
}
}
```

09.01.24

Week 5

```
import java.util.Scanner;

class Account {
    String customerName;
    int accountNumber;
    String accountType;
    double balance;

    Account(String name, int accNumber, String accType) {
        customerName = name;
        accountNumber = accNumber;
        accountType = accType;
        balance = 0.0;
    }

    void deposit(double amount) {
        balance += amount;
    }

    void displayBalance() {
        System.out.println("Balance for account " + accountNumber + ": $" + balance);
    }
}

class CurAcct extends Account {
    double minBalance;
    double serviceCharge;

    CurAcct(String name, int accNumber) {
        super(name, accNumber, "Current");
        minBalance = 1000.0;  // Example minimum balance for current account
        serviceCharge = 10.0; // Example service charge for falling below minimum balance
    }

    void checkMinBalance() {
        if (balance < minBalance) {
            balance -= serviceCharge;
            System.out.println("Service charge imposed. New balance: $" + balance);
```

```
}

class SavAcct extends Account {
    double interestRate;

    SavAcct(String name, int accNumber) {
        super(name, accNumber, "Savings");
        interestRate = 0.05; // Example interest rate for savings account
    }

    void computeInterest() {
        double interest = balance * interestRate;
        balance += interest;
        System.out.println("Interest computed. New balance: $" + balance);
    }

    void withdraw(double amount) {
        if (amount <= balance) {
            balance -= amount;
            System.out.println("Withdrawal successful. New balance: $" + balance);
        } else {
            System.out.println("Insufficient funds for withdrawal.");
        }
    }
}

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

        // Example usage
        CurAcct currentAccount = new CurAcct("John Doe", 123456);
        currentAccount.deposit(1500.0);
        currentAccount.displayBalance();
        currentAccount.checkMinBalance();

        SavAcct savingsAccount = new SavAcct("Jane Smith", 789012);
        savingsAccount.deposit(2000.0);
        savingsAccount.displayBalance();
        savingsAccount.computeInterest();
```