***Bank.java***

public interface Bank extends java.rmi.Remote

{

public String c\_name(String name) throws java.rmi.RemoteException;

public long account\_no(long acc\_no) throws java.rmi.RemoteException;

public long balance(long amount) throws java.rmi.RemoteException;

public long view(int amount)throws java.rmi.RemoteException;

public long deposit(int amount)throws java.rmi.RemoteException;

public long withdraw(int amount) throws java.rmi.RemoteException;

}

***BankImpl.java***

public class BankImpl extends java.rmi.server.UnicastRemoteObject implements Bank

{

public BankImpl() throws java.rmi.RemoteException

{

super();

}

public long view(int amount) throws java.rmi.RemoteException

{

System.out.println("\n\t\t\tCustomer Detail");

return amount;

}

public long deposit(int amount)throws java.rmi.RemoteException

{

System.out.println("\n\t\t\tAmount deposited");

return amount;

}

public long withdraw(int amount) throws java.rmi.RemoteException

{

System.out.println("\n\t\t\tAmount Withdrawn");

return amount;

}

public String c\_name(String name) throws java.rmi.RemoteException

{

System.out.println("\nThe name of the customer is:" + name);

return name;

}

public long account\_no(long acc\_no) throws java.rmi.RemoteException

{

System.out.println("\nThe Account Number is:" + acc\_no);

return acc\_no;

}

public long balance(long amount) throws java.rmi.RemoteException

{

System.out.println("\nThe Current Balance is:" + amount);

return amount;

}

}

***BankServer.java***

import java.rmi.Naming;

public class BankServer

{

public BankServer()

{

try

{

Bank c = new BankImpl();

Naming.rebind("rmi://localhost:1099/BankService", c);

}

catch (Exception e)

{

System.out.println("Trouble: " + e);

}

}

public static void main(String args[])

{

new BankServer();

}

}

***BankClient.java***

import java.io.\*;

import java.rmi.Naming;

import java.rmi.RemoteException;

import java.net.MalformedURLException;

import java.rmi.NotBoundException;

public class BankClient

{

public static void main(String[] args)

{

String name="default",namelist[]={"vinodh","parthi","karthi", "mei","bala","kasi"};

int acc\_no=0,acc\_nolist[]={1,2,3,4,5,6},amount=0,newamount[]={0,0,0,0,0,0},

amountlist[]={0,0,0,0,0,0},new\_amount, option,sub\_option,con=0,i,count=1;

DataInputStream in=new DataInputStream(System.in);

try

{

do

{

Bank c = (Bank)Naming.lookup("rmi: //localhost/BankService");

if (count == 1)

{

System.out.println("Enter the Account no:");

acc\_no = Integer.parseInt(in.readLine());

count = 0;

if (acc\_no == 1)

{

name = namelist[0];

acc\_no = acc\_nolist[0];

amount = amountlist[0] + newamount[0];

}

else if (acc\_no == 2)

{

name = namelist[1];

acc\_no = acc\_nolist[1];

amount = amountlist[1]+newamount[1];

}

else if (acc\_no == 3)

{

name = namelist[2];

acc\_no = acc\_nolist[2];

amount = amountlist[2]+newamount[2];

}

else if (acc\_no == 4)

{

name = namelist[3];

acc\_no = acc\_nolist[3];

amount = amountlist[3]+newamount[3];

}

else if (acc\_no == 5)

{

name = namelist[4];

acc\_no = acc\_nolist[4];

amount = amountlist[4]+newamount[4];

}

else if (acc\_no == 6)

{

name = namelist[5];

acc\_no = acc\_nolist[5];

amount = amountlist[5]+newamount[5];

}

else

{

System.out.println("Your entered account number is wrong:");

}

}

System.out.println("\nMenu list:");

System.out.print("\n\t1. To change the account no\n\n\t2. View Statement\n\n\t3. Deposit Money\n\n\t4. Withdraw Money");

System.out.print("\n\nEnter your Input as 1 or 2 or 3 or 4 only:");

option = Integer.parseInt(in.readLine());

switch (option)

{

case 1:

{

if (acc\_no == 1)

{

newamount[0] = amount;

}

else if (acc\_no == 2)

{

newamount[1]=amount;

}

else if (acc\_no == 3)

{

newamount[2]=amount;

}

else if (acc\_no == 4)

{

newamount[3]=amount;

}

else if (acc\_no == 5)

{

newamount[4]=amount;

}

else if (acc\_no == 6)

{

newamount[5]=amount;

}

count = 1;

break;

}

case 2:

{

c.view(amount);

c.c\_name(name);

c.account\_no(acc\_no);

c.balance(amount);

break;

}

case 3:

{

System.out.print("\nEnter the amount to be deposited:");

new\_amount = Integer.parseInt(in.readLine());

c.deposit(amount);

System.out.println("\nYour amount has been deposited successfully");

amount=amount+new\_amount;

c.c\_name(name);

c.account\_no(acc\_no);

c.balance(amount);

break;

}

case 4:

{

System.out.print("\nEnter the amount to be Withdrawn:");

new\_amount = Integer.parseInt(in. readLine());

if(new\_amount<=amount)

{

System.out.println("\nYour amount has been withdrawn successfully");

amount=amount-new\_amount;

c.withdraw(amount);

c.c\_name(name);

c.account\_no(acc\_no);

c.balance(amount);

}

else

{

System.out.println("\nInsufficient balance to withdrawn that amount from your account");

}

break;

}

default:

{

System.out.println("Your entered option is wrong:");

break;

}

}

System.out.print("\n\nTo go back to main menu then press 1:");

con = Integer.parseInt(in.readLine());

}

while (con== 1);

}

catch (Exception e)

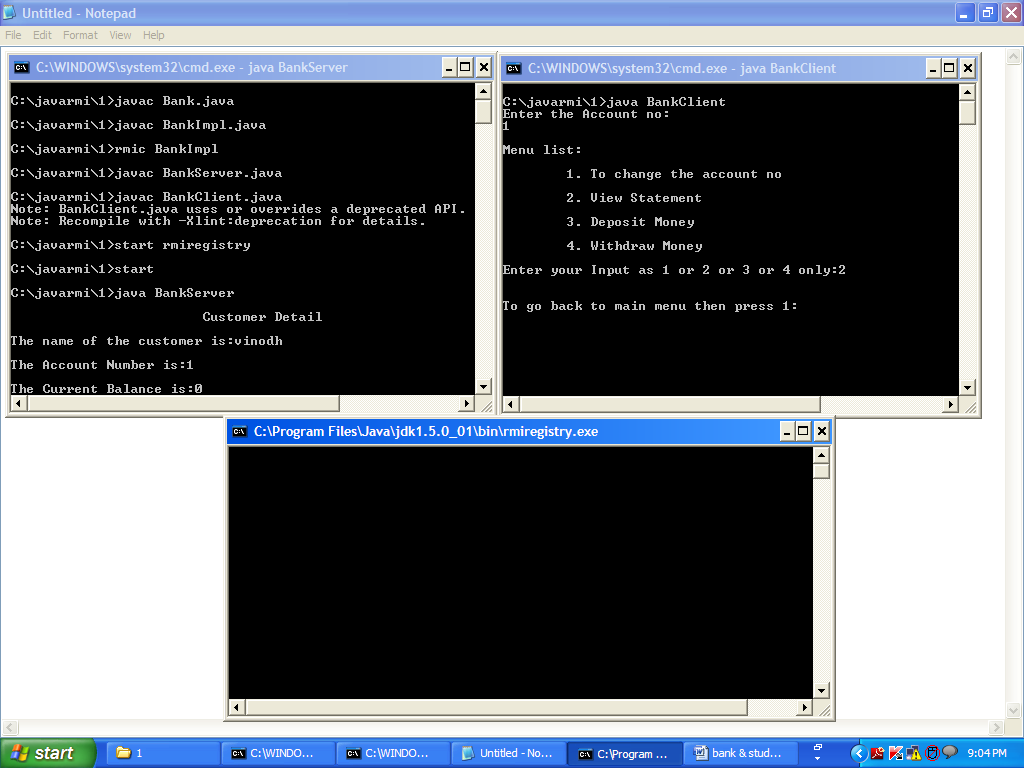
{

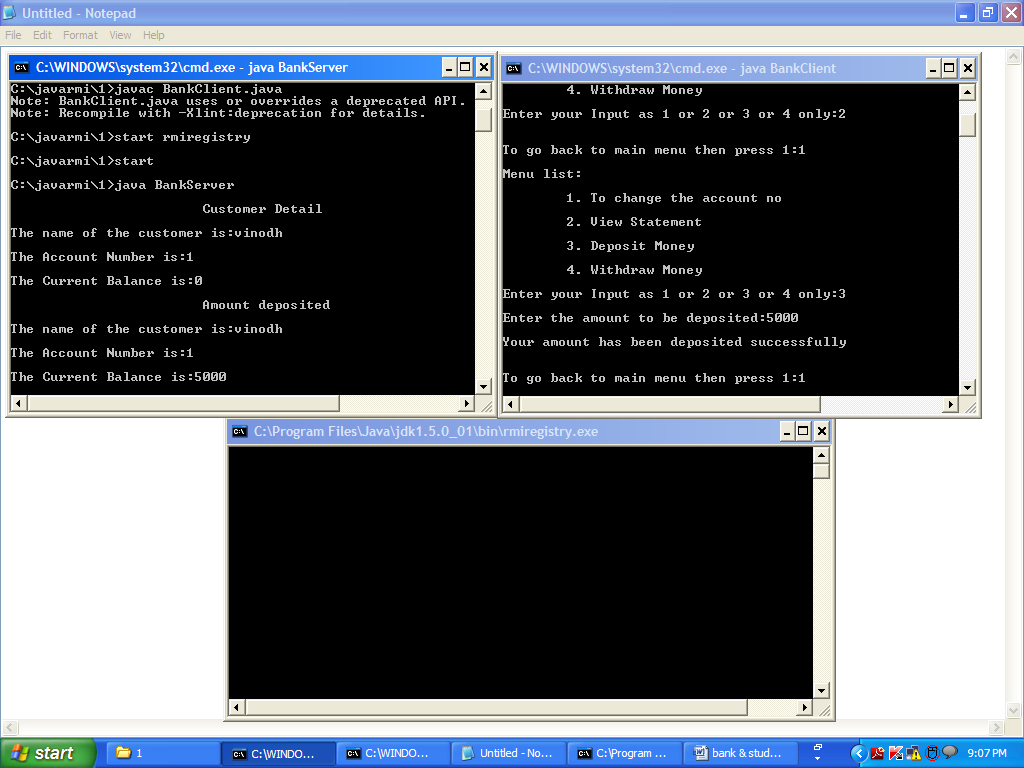
System.out.println("Error");

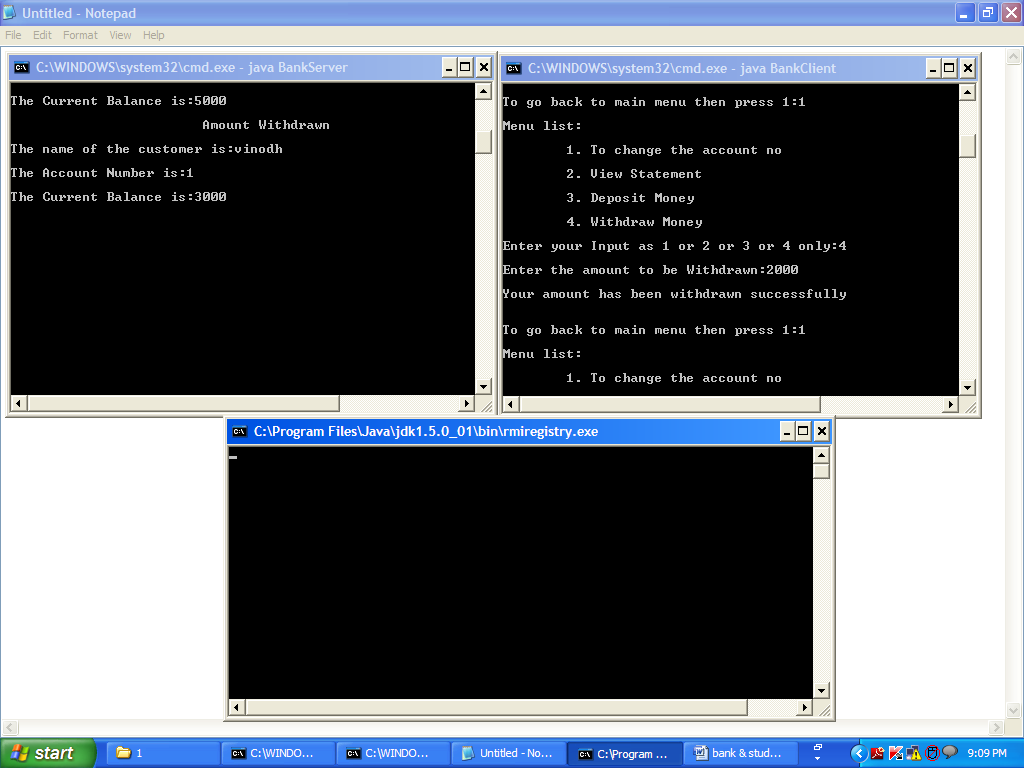
}

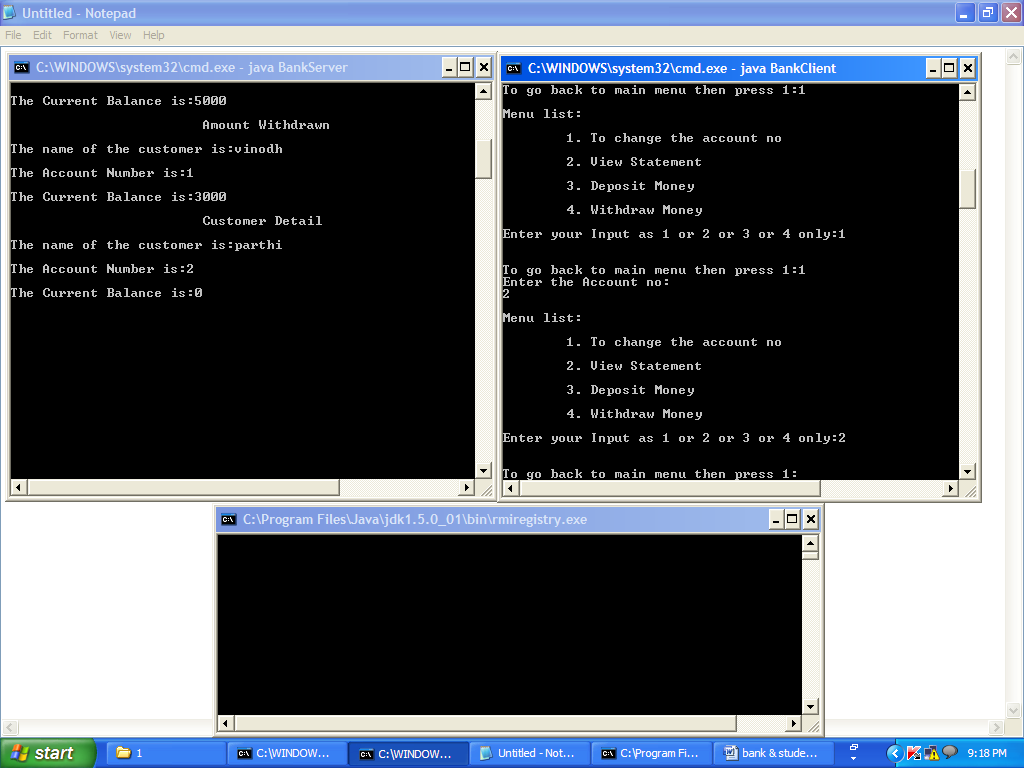
}

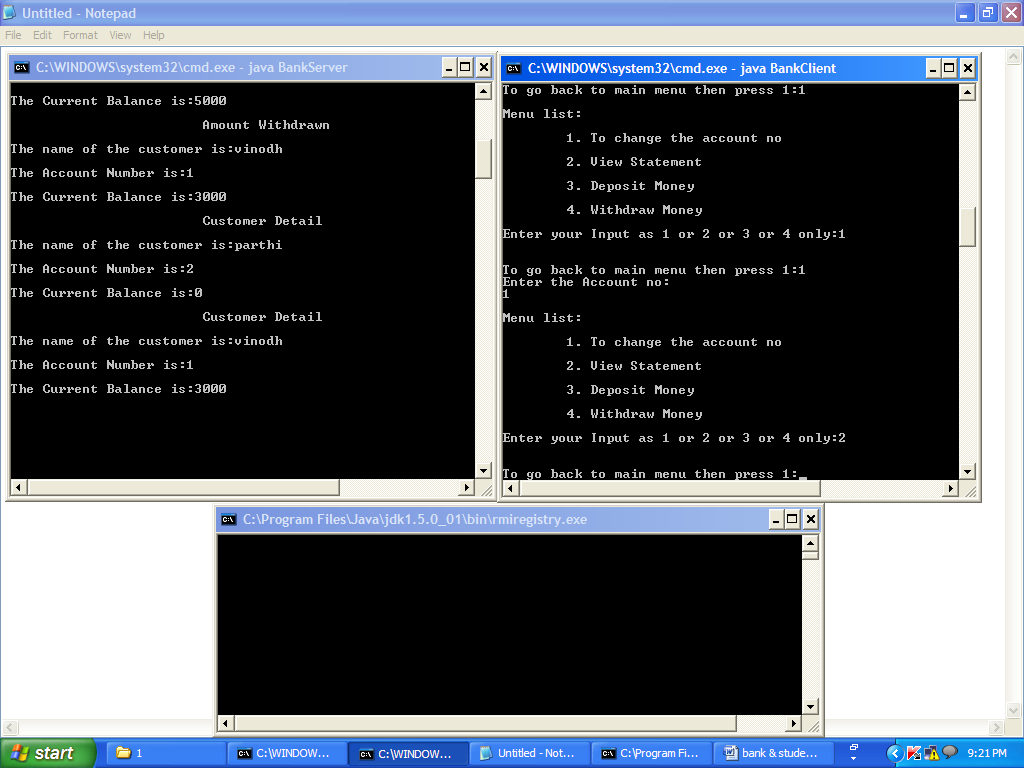
}

******

******

******

******

******

***Student.java***

public interface Student extends java.rmi.Remote

{

public String s\_name(String name) throws java.rmi.RemoteException;

public long reg\_no(long reg\_no) throws java.rmi.RemoteException;

public long marks(long m1, long m2, long m3) throws java.rmi.RemoteException;

public long total(long tot)throws java.rmi.RemoteException;

public long average(long average)throws java.rmi.RemoteException;

}

***StudentImpl.java***

public class StudentImpl extends java.rmi.server.UnicastRemoteObject implements Student

{

public StudentImpl() throws java.rmi.RemoteException

{

super();

}

public String s\_name(String name) throws java.rmi.RemoteException

{

System.out.println("\t\t\tStudent Detail");

System.out.println("\nName:" + name);

return name;

}

public long reg\_no(long reg\_no) throws java.rmi.RemoteException

{

System.out.println("\nReg.NO:" + reg\_no);

return reg\_no;

}

public long marks(long m1,long m2,long m3) throws java.rmi.RemoteException

{

System.out.println("\nMark1:" +m1);

System.out.println("\nMark2:" +m2);

System.out.println("\nMark3:" +m3);

return (m1+m2+m3);

}

public long total(long total) throws java.rmi.RemoteException

{

System.out.println("\nThe total of 3 marks is:"+total);

return total;

}

public long average(long average)throws java.rmi.RemoteException

{

System.out.println("\nThe average of 3 marks is:"+average);

return average;

}

}

***StudentServer.java***

import java.rmi.Naming;

public class StudentServer

{

public StudentServer()

{

try

{

Student s = new StudentImpl();

Naming.rebind("rmi://localhost:1099/BankService", s);

}

catch (Exception e)

{

System.out.println("Trouble: " + e);

}

}

public static void main(String args[])

{

new StudentServer();

}

}

***StudentClient.java***

import java.io.\*;

import java.rmi.Naming;

import java.rmi.RemoteException;

import java.net.MalformedURLException;

import java.rmi.NotBoundException;

public class StudentClient

{

public static void main(String[] args)

{

String name="default",namelist{"raju","ramu","dilip","siva","rajiv","anbu"}; int reg\_no = 0, reg\_nolist[] ={ 1, 2, 3, 4, 5, 6 };

int m1list[] ={ 50, 60, 50, 60, 50, 60 }, m2list[] ={ 50, 60, 50, 60, 50, 60 },m1=0,m2=0, m3=0;

int m3list[] ={ 50, 60, 50, 60, 50, 60}, option, sub\_option, con = 0, i, count = 1,total=0, average=0;

DataInputStream in=new DataInputStream(System.in);

try

{

do

{

Student s = (Student)Naming.lookup("rmi://localhost/BankService");

if (count == 1)

{

System.out.println("Enter the Register no:");

reg\_no = Integer.parseInt(in.readLine());

count = 0;

if (reg\_no == 1)

{

name = namelist[0];

reg\_no = reg\_nolist[0];

m1 = m1list[0];

m2 = m2list[0];

m3 = m3list[0];

}

else if (reg\_no == 2)

{

name = namelist[1];

reg\_no = reg\_nolist[1];

m1 = m1list[1];

m2 = m2list[1];

m3 = m3list[1];

}

else if (reg\_no == 3)

{

name = namelist[2];

reg\_no = reg\_nolist[2];

m1 = m1list[2];

m2 = m2list[2];

m3 = m3list[2];

}

else if (reg\_no == 4)

{

name = namelist[3];

reg\_no = reg\_nolist[3];

m1 = m1list[3];

m2 = m2list[3];

m3 = m3list[3];

}

else if (reg\_no == 5)

{

name = namelist[4];

reg\_no = reg\_nolist[4];

m1 = m1list[4];

m2 = m2list[4];

m3 = m3list[4];

}

else if (reg\_no == 6)

{

name = namelist[5];

reg\_no = reg\_nolist[5];

m1 = m1list[5];

m2 = m2list[5];

m3 = m3list[5];

}

else

{

System.out.println("Your entered register number is wrong:");

}

}

System.out.println("\nMenu list:");

System.out.print("\n\t1. To change the register no\n\n\t2. View Details\n\n\t3. Total\n\n\t4. Average");

System.out.print("\n\nEnter your Input as 1 or 2 or 3 or 4 only:");

option = Integer.parseInt(in.readLine());

switch (option)

{

case 1:

{

count = 1;

break;

}

case 2:

{

s.s\_name(name);

s.reg\_no(reg\_no);

s.marks(m1,m2,m3);

break;

}

case 3:

{

System.out.print("\nThe Total of Three Marks is:");

total = m1 + m2 + m3;

System.out.print("" + total);

s.total(total);

break;

}

case 4:

{

System.out.print("\nThe average of Three Marks is:");

average = total / 3;

System.out.print("" + average);

s.average(average);

break;

}

default:

{

System.out.println("Your entered option is wrong:");

break;

}

}

System.out.print("\n\nTo go back to main menu then press 1:");

con = Integer.parseInt(in.readLine());

}

while (con== 1);

}

catch (Exception e)

{

System.out.println("Error");

}

}

}

