6/11/2020 OOJ
1BM17CS071 Lab Program-5

```
import java.util.Scanner;
class Account {
String cust_name, type;
long account_num;
double balance;
boolean check_book;
static double min = 500.0, sercharge
    =100;
Scanner ss = new Scanner (System.in);
void getdata() {
System.out.println("Enter the name
of the customer:");
cust_name = ss.nextLine();
System.out.println("Enter the account
number:");
account_num = ss.nextLong();
System.out.println("Enter the balance
amount:");
balance = ss.nextDouble();
}
void display() {
System.out.println("Customer name:"
```

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+cust_name);
System.out.println("Account
number:"+account_num);
System.out.println("Current Balance
:"+balance);
  }
}
class Savings extends Account{
double interest, rate=0.03, withdraw_
amt;
int n, time;
Scanner ss=new Scanner(System.in);
void calc_interest(){
System.out.println("Enter the time in
years:");
time=ss.nextInt();
System.out.println("Enter the number of
times the interest is to be compunded:");
n=ss.nextInt();
interest=balance*(Math.pow((1+
(rate/n)),(time*n)));
balance+=interest;
System.out.println("The interest amount
is:"+interest);
System.out.println("The balance after
```

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calculating the interest is:" + balance);
}
void withdraw its:" + Double
void withdraw() {
System.out.println("Enter the amount
to be withdraw: ");
withdraw_amt = ss.nextDouble();
if (Balance > withdraw_amt)
balance = withdraw_amt;
else
System.out.println("The balance
amount is insufficient");
System.out.println("The total
balance after withdrawal is :" balance);
}
void penalty() {
if (balance < min){
balance = balance - serchaege;
System.out.println("The balance
amount after the penalty:" + balance);
}
else
System.out.println("No penalty is
imposed.");
}
```

```
}
class Current extends Account {
Scanner ss = new Scanner(System.in);
double deposit;
void getdeposit(){
System.out.println("Enter the
amount to be deposited:");
deposit = ss.nextDouble();
balance+= deposit;
System.out.println("The total
balance after deposit is:"+balance);
}
void penalty(){
if(balance<min){
balance = balance - servcharge;
System.out.println("No penalty is
imposed.");
}
}
class BankMain{
public static void main(String args[]
    ){
int type;
Savings s = new Savings();
Current c = new Scanner(System.in);
```

```
System.out.println("Enter the type
of account:");
System.out.println("Enter 1 for Savings
and 2 for Current:");
type = ss.nextInt();
if (type == 1){
int withdrew = 0;
s.getdata();
s.display();
s.calc_interest();
System.out.println("Would you
like to withdraw money from your
account?");
System.out.println("Enter 1 if yes
and 2 if no:");
withdrew = ss.nextInt();
if (withdrew == 1){
s.withdraw();
}
s.penalty();
}
if (type == 2){
int deposit = 0;
c.getdata();
c.display();
```

```
System.out.println("Would you like to deposit money to your account?");
System.cout.println("Enter 1 if yes and 2 if no:");
 if (deposit==1){
C.getdeposit();
 }
 C.penalty();
 }
}
```