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Lab Program 5

```
import java.util.Scanner;
abstract class Account
{
  String cust_name;
  Long acc_no;
  String acc_type;
  double balance;
  double min_bal = 1000.0;
Account (String cust_name, long acc_no, String
                acc_type, double balance)
  {
    this.cust_name = cust_name;
    this.acc_no = acc_no;
    this.acc_type = acc_type;
    this.balance = balance;
  }
abstract void deposit (double amount);
abstract void display ();
abstract void withdrawal (double amount);
}
class Curr_acct extends Account
{
   double penalty = 100.0;
Curr_acct (String cust_name, long acc_no,
                String acc_type, double balance)
  {
   super (cust_name, acc_no, acc_type, balance);
System.out.println ("Name of the customer" +
                                    cust_name);
System.out.println ("Account Number : " + acc_no);
```

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```
System.out.println ("Account type :" +acc_type);
System.out.println ("Balance :" +balance);
}
void deposit (double Amount)
{
 this.balance = this.balance + amount;
}
void withdrawal ( double amount)
 {
 this.balance = this.balance - amount;
 imposepenalty ();
System.out.println (" The current balance is "+
                                    balance);
 }
void imposepenalty ()
{
   if ( this.balance < min_bal)
    {
      this.balance = this.balance -penalty;
      System.out.println ("The balance amount is
            in sufficient , the penalty imposed =100Rs");
    }
}
void display ()
{
  System.out.println (" Balance is : " + this.balance);
}
class Sav_acct extends Account
  {
   Sav-acct ( String cust_name , long acc_no, String
                        acc_type , double balance)
```

```
{
super(cust_name, acc_no, acc_type, balance);
System.out.println("Name of the customer : "
                                + cust_name);
System.out.println("Account Number : "+acc_no);
System.out.println("Account type : "+acc_type);
System.out.println("Balance : "+balance);
}
void deposit (double amount)
{
this.balance = this.balance + amount;
interest();
}
void interest()
{
  int rate = 10, time = 1;
float ci = (float) (this.balance * Math.pow
                (1+rate/100.0, time) -
                this.balance);
System.out.println
{ this.balance = this.balance + ci;
}
void withdrawal (double amount)
{
 this.balance = this.balance - amount;
 System.out.println("The current balance is"
                                + balance);
}
void display()
{
 System.out.println("Balance is " + this.balance);
}
}
```

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```
class AccountMain
{
public static void main (String [] args)
{
Scanner xx = new Scanner (System.in);
Double amount;
int flag = 0;
while (flag ==0)
{
System.out.println("Enter type of Account: \n
    1. Current account \n 2. Savings account");
int choice = xx.nextInt();
switch (choice)
{
Case 1: System.out.println("\n Current Account:\n");
System.out.println("Enter the name of account
    holder");
String f = xx.next();
System.out.println("Enter the account
    number");
Long g = xx.nextLong();
System.out.println("Enter the balance
amount");
double h = xx.nextDouble();
Curr_acct c = new Curr_acct (f, g, "Current", h);
int flag1 = 0;
while (flag1 ==0).
{
System.out.println("Enter your choice \n
    1: Deposit amount \n 2: Display Balance
    \n 3: Withdraw");
```

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```
int choice1 = xx.nextInt();
Switch(choice1)
{
case 1:
System.out.println("Enter amount to be deposited :");
amount=xx.nextDouble();
c.deposit(amount);
break;
case 2:
c.display();
break;
Case 3:
System.out.println("Enter amount you want to withdraw");
amount = xx.nextDouble();
c.withdrawal(amount);
break;
default:
flag1 =1;
}
}
break;
case 2: System.out.println("Savings Account:");
System.out.println("Enter the name of the account holder");
String p = xx.next();
System.out.println("Enter the account number");
long q = xx.nextLong();
```

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```
System.out.println("Enter the balance amount");
double r = xx.nextDouble();
Sav_acct s = new Sav_acct(p,q,"Savings",r);
int flag2 = 0;
while(flag2 == 0)
{
System.out.println("Enter your choice \n
      1: Deposit amount \n 2: Display balance \n
                              3: Withdraws");
int choice2 = xx.nextInt();
switch(choice2)
{
case 1: System.out.println("Enter amount to be
                    deposited :");
amount = xx.nextDouble();
s.deposit(amount);
break;
Case 2:
s.display();
break;
Case 3:
System.out.println("Enter amount you want
                    to withdraw :");
amount = xx.nextDouble();
s.withdrawal(amount);
break;
default:
flag2 = 1;
}
}

break;
```

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```
default : flag=1 ;
}
}
}
}
}
```