

```
package bank;
import javax.swing.JOptionPane;
public class bank
{
    public static void main(String[] args)
    {
        double begin_bal, end_bal;
        double tran_amount;
        int tran_type, acct_type;
        String svalue, output;
        output = "Enter beginning balance $";
        svalue = JOptionPane.showInputDialog(null,
        output, " ", JOptionPane.QUESTION_MESSAGE);
        begin_bal=Double.parseDouble(svalue);

        output= "1 - checking, 2 - savings";
        svalue =JOptionPane.showInputDialog(null,
        output, " ",JOptionPane.QUESTION_MESSAGE);
        acct_type=Integer.parseInt(svalue);

        output= "1 - deposit, 2 - withdrawel";
        svalue =JOptionPane.showInputDialog(null,
        output, " ",JOptionPane.QUESTION_MESSAGE);
        tran_type=Integer.parseInt(svalue);

        output= "Enter the Amount";
        svalue =JOptionPane.showInputDialog(null,
        output, " ",JOptionPane.QUESTION_MESSAGE);
        tran_amount=Double.parseDouble(svalue);
    }
}
```

Program written without
methods

```

if (acct_type == 1) //account is checking
{
    if (tran_type == 1)
        end_bal = begin_bal + tran_amount;
    else
        end_bal = begin_bal - tran_amount - 0.25;
}
else //account is savings
{
    if (tran_type == 1)
        end_bal = begin_bal + tran_amount + 0.1 * tran_amount;
    else
        end_bal = begin_bal - tran_amount;
} //else savings

System.out.println(" Transaction Summary ");
System.out.println("===== ");
if (acct_type == 1)
    output= "Checking" ;
else
    output= "Savings" ;
System.out.println("Account Type    = "+output);
if (tran_type == 1)
    output= "Deposit" ;
else
    output="Withdrawl" ;
System.out.println("Transaction Type  = " +output);
System.out.println("Begining Balance  = " +begin_bal);
System.out.println("Transaction Amount = " +tran_amount);
System.out.println("Ending Balance   = " +end_bal);

System.exit(0);
}
}

```

```

package bank1;
import javax.swing.JOptionPane;
public class bank1
{
    public static void main(String[] args)
    {
        double begin_bal, end_bal;
        double tran_amount;
        int tran_type, acct_type;
        String svalue, output;
        output = "Enter beginning balance $";
        svalue = JOptionPane.showInputDialog(null,
        output, " ", JOptionPane.QUESTION_MESSAGE);
        begin_bal=Double.parseDouble(svalue);

        output= "1 - checking, 2 - savings";
        svalue =JOptionPane.showInputDialog(null,
        output, " ",JOptionPane.QUESTION_MESSAGE);
        acct_type=Integer.parseInt(svalue);

        output= "1 - deposit, 2 - withdrawel";
        svalue =JOptionPane.showInputDialog(null,
        output, " ",JOptionPane.QUESTION_MESSAGE);
        tran_type=Integer.parseInt(svalue);

        output= "Enter the Amount";
        svalue =JOptionPane.showInputDialog(null,
        output, " ",JOptionPane.QUESTION_MESSAGE);
        tran_amount=Double.parseDouble(svalue);

        end_bal= calculate_balance(acct_type,tran_type,begin_bal,tran_amount);
        print_output(acct_type,tran_type,begin_bal,tran_amount,end_bal);
        System.exit(0);
    }
}

```

Program written with
methods

```

public static double calculate_balance(int acct_type, int tran_type, double begin_bal,
    double tran_amount)
{
    double end_bal=0;
    if (acct_type == 1) //account is checking
    {
        if (tran_type == 1)
            end_bal = begin_bal + tran_amount;
        else
            end_bal = begin_bal - tran_amount - 0.25;
    }
    else //account is savings
    {
        if (tran_type == 1)
            end_bal = begin_bal + tran_amount + 0.1 * tran_amount;
        else
            end_bal = begin_bal - tran_amount;
    } //else savings
    return end_bal;
} //end of calculate balance

public static void print_output(int acct_type, int tran_type, double begin_bal,
    double tran_amount, double end_bal)
{
    String output;
    System.out.println(" Transaction Summary ");
    System.out.println("===== ");
    if (acct_type == 1)
        output= "Checking" ;
    else
        output= "Savings" ;
    System.out.println("Account Type    = "+output);
    if (tran_type == 1)
        output= "Deposit" ;
    else
        output="Withdrawl" ;
    System.out.println("Transaction Type  = " +output);
    System.out.println("Begining Balance  = " +begin_bal);
    System.out.println("Transaction Amount = " +tran_amount);
    System.out.println("Ending Balance    = " + end_bal);
}
}

```