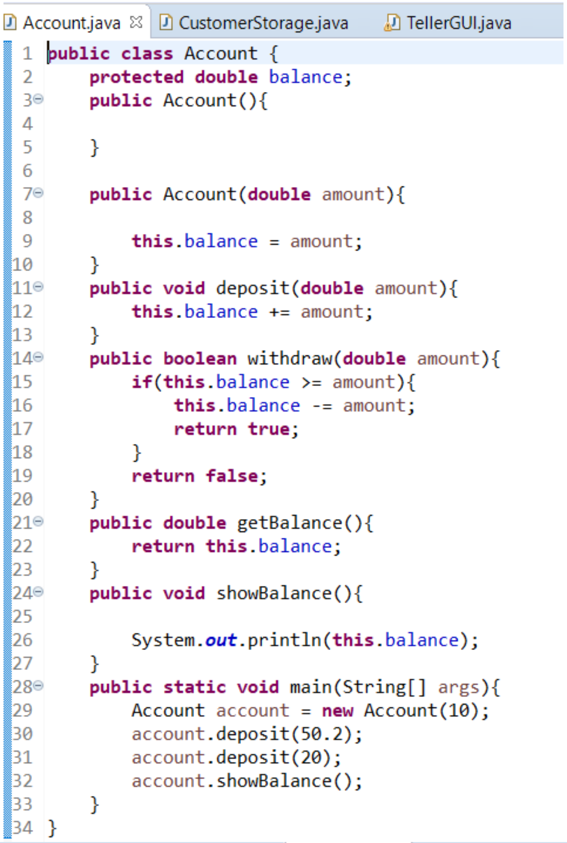
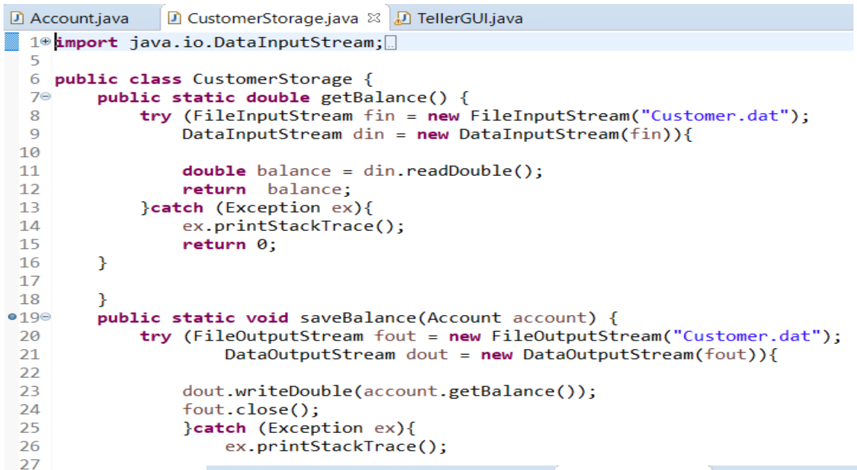
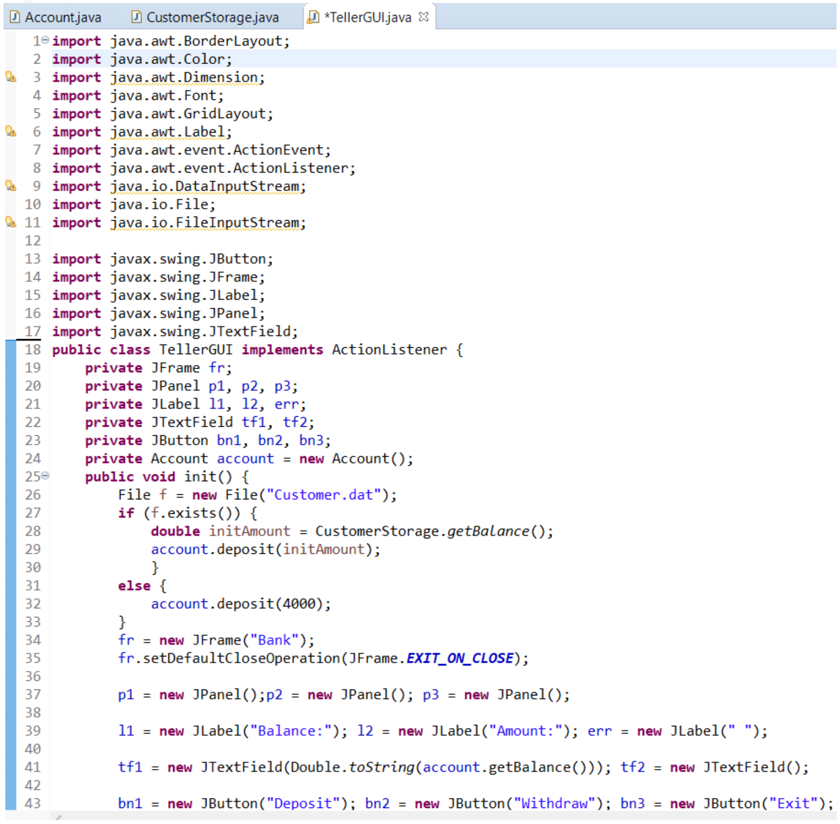
Lab 10 คลาสที่เกี่ยวข้องกับอินพุตและเอาต์พุต



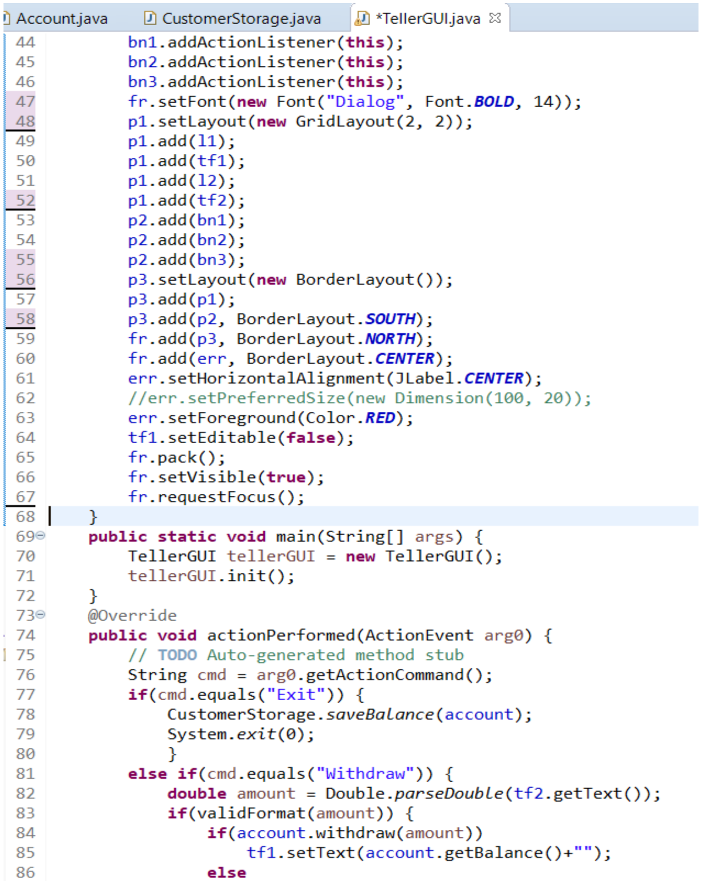
```java
public class Account {
    protected double balance;
    public Account(){

    }

    public Account(double amount){

        this.balance = amount;
    }
    public void deposit(double amount){
        this.balance += amount;
    }
    public boolean withdraw(double amount){
        if(this.balance >= amount){
            this.balance -= amount;
            return true;
        }
        return false;
    }
    public double getBalance(){
        return this.balance;
    }
    public void showBalance(){

        System.out.println(this.balance);
    }
    public static void main(String[] args){
        Account account = new Account(10);
        account.deposit(50.2);
        account.deposit(20);
        account.showBalance();
    }
}
```



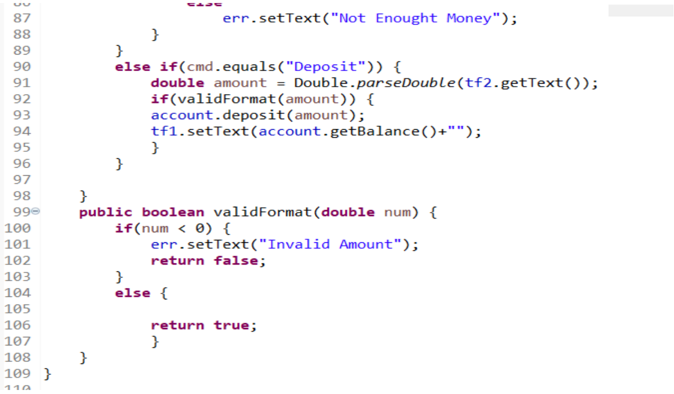
```java
import java.io.DataInputStream;

public class CustomerStorage {
    public static double getBalance() {
        try (FileInputStream fin = new FileInputStream("Customer.dat");
            DataInputStream din = new DataInputStream(fin)){

            double balance = din.readDouble();
            return  balance;
        }catch (Exception ex){
            ex.printStackTrace();
            return 0;
        }

    }
    public static void saveBalance(Account account) {
        try (FileOutputStream fout = new FileOutputStream("Customer.dat");
              DataOutputStream dout = new DataOutputStream(fout)){

            dout.writeDouble(account.getBalance());
            fout.close();
            }catch (Exception ex){
              ex.printStackTrace();

            }
    }
}
```



```java
import java.awt.BorderLayout;
import java.awt.Color;
import java.awt.Dimension;
import java.awt.Font;
import java.awt.GridLayout;
import java.awt.Label;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;
import java.io.DataInputStream;
import java.io.File;
import java.io.FileInputStream;

import javax.swing.JButton;
import javax.swing.JFrame;
import javax.swing.JLabel;
import javax.swing.JPanel;
import javax.swing.JTextField;
public class TellerGUI implements ActionListener {
    private JFrame fr;
    private JPanel p1, p2, p3;
    private JLabel l1, l2, err;
    private JTextField tf1, tf2;
    private JButton bn1, bn2, bn3;
    private Account account = new Account();
    public void init() {
        File f = new File("Customer.dat");
        if (f.exists()) {
            double initAmount = CustomerStorage.getBalance();
            account.deposit(initAmount);
            }
        else {
            account.deposit(4000);
        }
        fr = new JFrame("Bank");
        fr.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);

        p1 = new JPanel();p2 = new JPanel(); p3 = new JPanel();

        l1 = new JLabel("Balance:"); l2 = new JLabel("Amount:"); err = new JLabel(" ");

        tf1 = new JTextField(Double.toString(account.getBalance())); tf2 = new JTextField();

        bn1 = new JButton("Deposit"); bn2 = new JButton("Withdraw"); bn3 = new JButton("Exit");
```



```java
        bn1.addActionListener(this);
        bn2.addActionListener(this);
        bn3.addActionListener(this);
        fr.setFont(new Font("Dialog", Font.BOLD, 14));
        p1.setLayout(new GridLayout(2, 2));
        p1.add(l1);
        p1.add(tf1);
        p1.add(l2);
        p1.add(tf2);
        p2.add(bn1);
        p2.add(bn2);
        p2.add(bn3);
        p3.setLayout(new BorderLayout());
        p3.add(p1);
        p3.add(p2, BorderLayout.SOUTH);
        fr.add(p3, BorderLayout.NORTH);
        fr.add(err, BorderLayout.CENTER);
        err.setHorizontalAlignment(JLabel.CENTER);
        //err.setPreferredSize(new Dimension(100, 20));
        err.setForeground(Color.RED);
        tf1.setEditable(false);
        fr.pack();
        fr.setVisible(true);
        fr.requestFocus();
    }
    public static void main(String[] args) {
        TellerGUI tellerGUI = new TellerGUI();
        tellerGUI.init();
    }
    @Override
    public void actionPerformed(ActionEvent arg0) {
        // TODO Auto-generated method stub
        String cmd = arg0.getActionCommand();
        if(cmd.equals("Exit")) {
            CustomerStorage.saveBalance(account);
            System.exit(0);
            }
        else if(cmd.equals("Withdraw")) {
            double amount = Double.parseDouble(tf2.getText());
            if(validFormat(amount)) {
                if(account.withdraw(amount))
                    tf1.setText(account.getBalance()+"");
                else
```



```java
                    err.setText("Not Enought Money");
                }
        }
        else if(cmd.equals("Deposit")) {
            double amount = Double.parseDouble(tf2.getText());
            if(validFormat(amount)) {
            account.deposit(amount);
            tf1.setText(account.getBalance()+"");
            }
        }

    }
    public boolean validFormat(double num) {
        if(num < 0) {
            err.setText("Invalid Amount");
            return false;
        }
        else {

            return true;
            }
    }
}
```