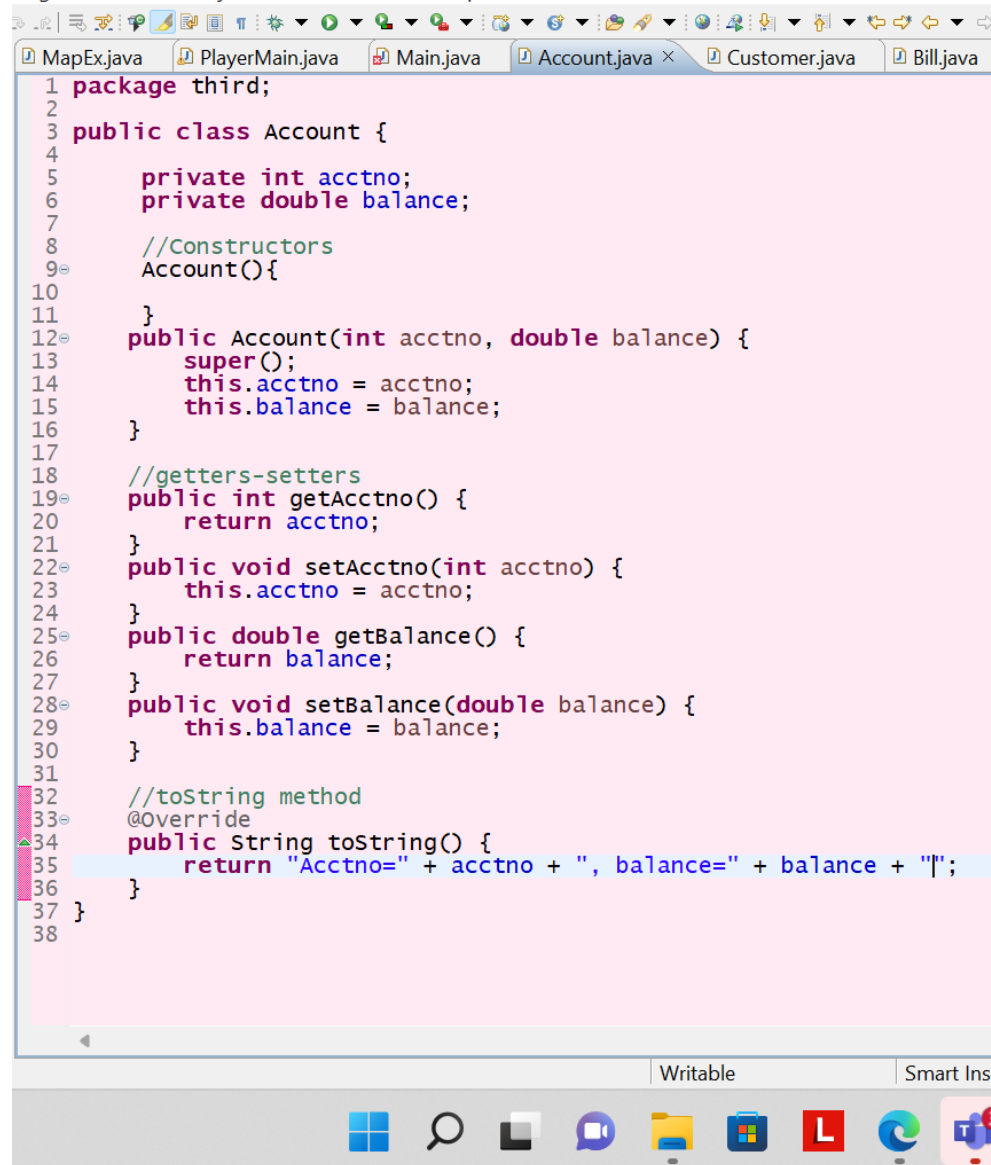


:/src/third/Account.java - Eclipse IDE

avigate Search Project Run Window Help



```
1 package third;
2
3 public class Account {
4
5     private int acctno;
6     private double balance;
7
8     //Constructors
9     Account(){
10
11     }
12     public Account(int acctno, double balance) {
13         super();
14         this.acctno = acctno;
15         this.balance = balance;
16     }
17
18     //getters-setters
19     public int getAcctno() {
20         return acctno;
21     }
22     public void setAcctno(int acctno) {
23         this.acctno = acctno;
24     }
25     public double getBalance() {
26         return balance;
27     }
28     public void setBalance(double balance) {
29         this.balance = balance;
30     }
31
32     //toString method
33     @Override
34     public String toString() {
35         return "Acctno=" + acctno + ", balance=" + balance + "|";
36     }
37 }
38
```

MapEx.java PlayerMain.java Main.java Account.java × Customer.java Bill.java

Writable Smart Ins

Customer Class

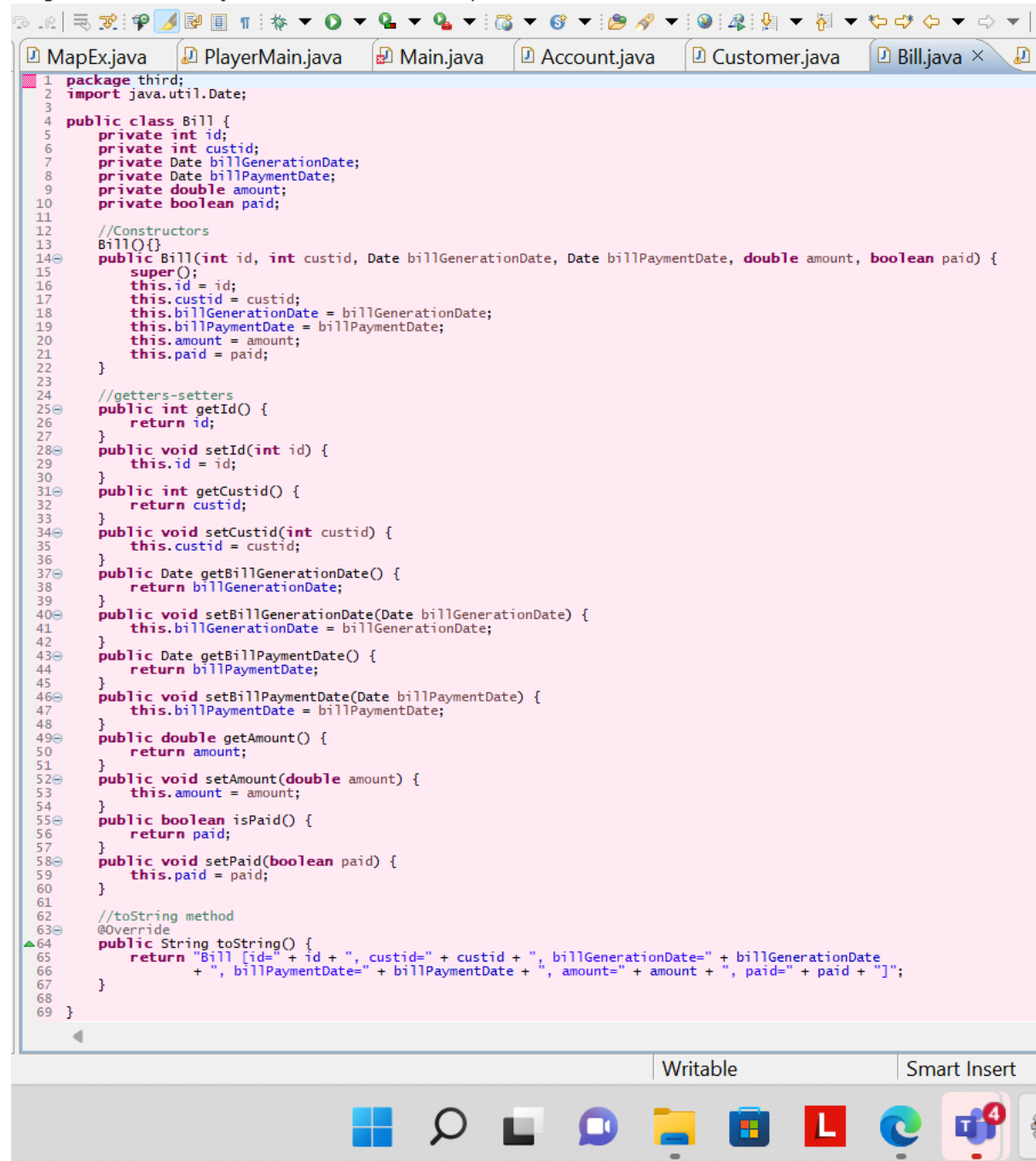
src/third/Customer.java - Eclipse IDE

vigate Search Project Run Window Help

```
1 package third;
2
3
4 public class Customer {
5     //fields
6     private int id;
7     private String name;
8     private String phone;
9     private Account account;
10
11     //constructors
12     Customer(){}
13     public Customer(int id, String name, String phone, Account account) {
14         super();
15         this.id = id;
16         this.name = name;
17         this.phone = phone;
18         this.account = account;
19     }
20
21     //setter-getter
22     public int getId() {
23         return id;
24     }
25     public void setId(int id) {
26         this.id = id;
27     }
28     public String getName() {
29         return name;
30     }
31     public void setName(String name) {
32         this.name = name;
33     }
34     public String getPhone() {
35         return phone;
36     }
37     public void setPhone(String phone) {
38         this.phone = phone;
39     }
40     public Account getAccount() {
41         return account;
42     }
43     public void setAccount(Account account) {
44         this.account = account;
45     }
46
47     //toString()
48     @Override
49     public String toString() {
50         return "Customer Details:\nCustomerId=" + id + ", name=" + name + ", phone=" + phone + ", " + account + "";
51     }
52 }
```

E/src/third/Bill.java - Eclipse IDE

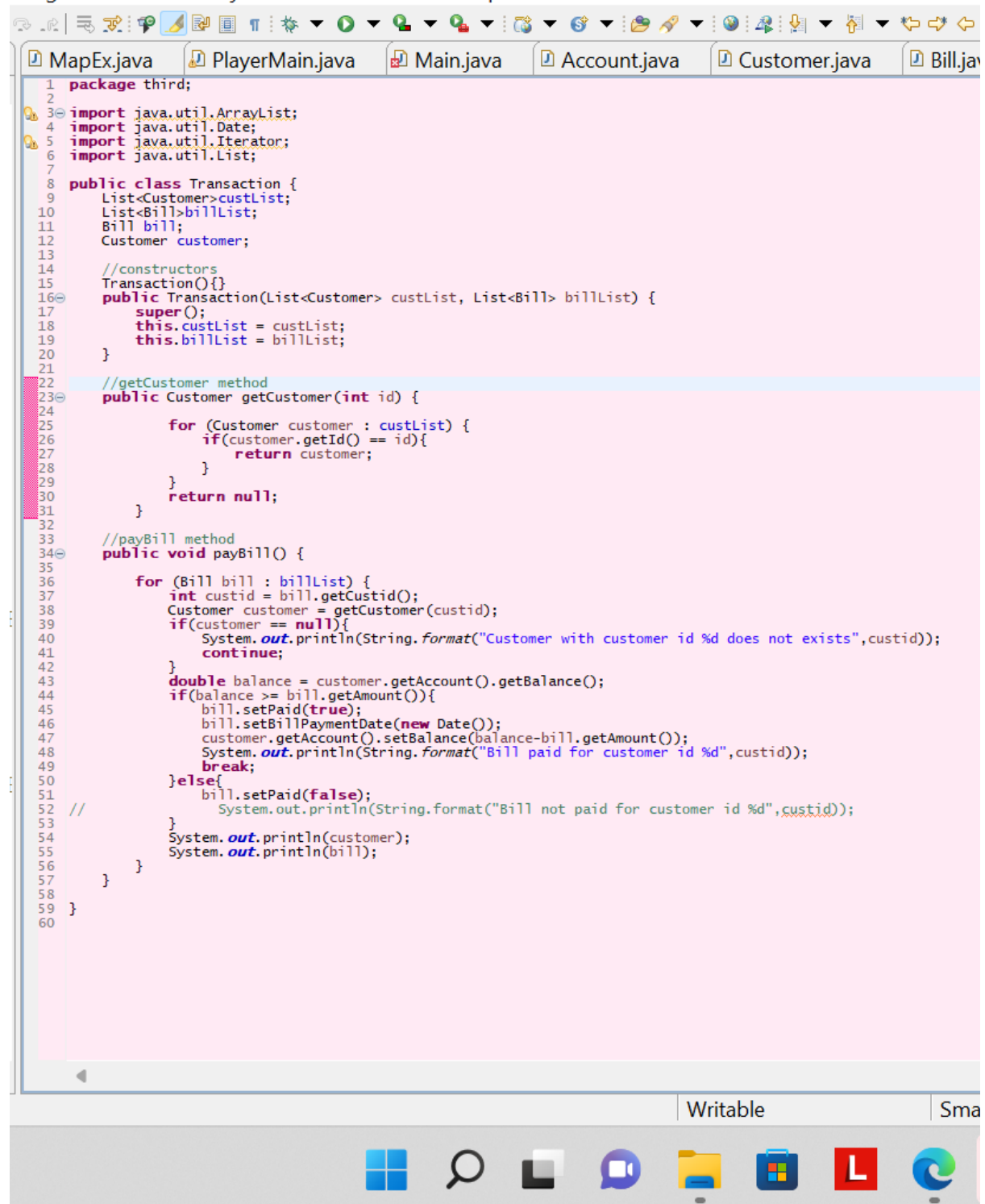
Navigate Search Project Run Window Help



```
1 package third;
2 import java.util.Date;
3
4 public class Bill {
5     private int id;
6     private int custid;
7     private Date billGenerationDate;
8     private Date billPaymentDate;
9     private double amount;
10    private boolean paid;
11
12    //Constructors
13    Bill(){}
14    public Bill(int id, int custid, Date billGenerationDate, Date billPaymentDate, double amount, boolean paid) {
15        super();
16        this.id = id;
17        this.custid = custid;
18        this.billGenerationDate = billGenerationDate;
19        this.billPaymentDate = billPaymentDate;
20        this.amount = amount;
21        this.paid = paid;
22    }
23
24    //getters-setters
25    public int getId() {
26        return id;
27    }
28    public void setId(int id) {
29        this.id = id;
30    }
31    public int getCustid() {
32        return custid;
33    }
34    public void setCustid(int custid) {
35        this.custid = custid;
36    }
37    public Date getBillGenerationDate() {
38        return billGenerationDate;
39    }
40    public void setBillGenerationDate(Date billGenerationDate) {
41        this.billGenerationDate = billGenerationDate;
42    }
43    public Date getBillPaymentDate() {
44        return billPaymentDate;
45    }
46    public void setBillPaymentDate(Date billPaymentDate) {
47        this.billPaymentDate = billPaymentDate;
48    }
49    public double getAmount() {
50        return amount;
51    }
52    public void setAmount(double amount) {
53        this.amount = amount;
54    }
55    public boolean isPaid() {
56        return paid;
57    }
58    public void setPaid(boolean paid) {
59        this.paid = paid;
60    }
61
62    //toString method
63    @Override
64    public String toString() {
65        return "Bill [id=" + id + ", custid=" + custid + ", billGenerationDate=" + billGenerationDate
66            + ", billPaymentDate=" + billPaymentDate + ", amount=" + amount + ", paid=" + paid + "];"
67    }
68
69 }
```

E/src/third/Transaction.java - Eclipse IDE

Navigate Search Project Run Window Help



```
1 package third;
2
3 import java.util.ArrayList;
4 import java.util.Date;
5 import java.util.Iterator;
6 import java.util.List;
7
8 public class Transaction {
9     List<Customer> custList;
10    List<Bill> billList;
11    Bill bill;
12    Customer customer;
13
14    //constructors
15    Transaction(){}
16    public Transaction(List<Customer> custList, List<Bill> billList) {
17        super();
18        this.custList = custList;
19        this.billList = billList;
20    }
21
22    //getCustomer method
23    public Customer getCustomer(int id) {
24
25        for (Customer customer : custList) {
26            if(customer.getId() == id){
27                return customer;
28            }
29        }
30        return null;
31    }
32
33    //payBill method
34    public void payBill() {
35
36        for (Bill bill : billList) {
37            int custid = bill.getCustid();
38            Customer customer = getCustomer(custid);
39            if(customer == null){
40                System.out.println(String.format("Customer with customer id %d does not exists",custid));
41                continue;
42            }
43            double balance = customer.getAccount().getBalance();
44            if(balance >= bill.getAmount()){
45                bill.setPaid(true);
46                bill.setBillPaymentDate(new Date());
47                customer.getAccount().setBalance(balance-bill.getAmount());
48                System.out.println(String.format("Bill paid for customer id %d",custid));
49                break;
50            }else{
51                bill.setPaid(false);
52                System.out.println(String.format("Bill not paid for customer id %d",custid));
53            }
54            System.out.println(customer);
55            System.out.println(bill);
56        }
57    }
58 }
59
60
```

/src/third/Main.java - Eclipse IDE

Navigate Search Project Run Window Help

```
MapEx.java PlayerMain.java Main.java Account.java Customer.java Bill.java Transaction.java
1 package third;
2
3 import java.text.DateFormat;
4 import java.util.ArrayList;
5 import java.util.Date;
6 import java.util.List;
7
8 public class Main {
9
10     public static void main(String[] args) {
11         // TODO Auto-generated method stub
12
13         //object of Account class
14         Account acc1,acc2;
15         acc1= new Account(1,1000.0);
16         acc2= new Account(2,1500.50);
17
18         //Objects of Customer class
19         Customer c1,c2;
20         c1= new Customer(1, "Tom", "9090901010",acc1 );
21         c2= new Customer(2, "Jerry", "9090902020",acc2 );
22
23         List<Customer> custList = new ArrayList<>();
24
25         //adding customers to customer list
26         custList.add(c1);
27         custList.add(c2);
28
29
30         // Date billGenerationDate= new Date();System.out.println(billGenerationDate);
31
32         //creating bill list through ArrayList
33         List<Bill> billList = new ArrayList<>();
34         billList.add(new Bill(1,1,new Date(1662976221000L),new Date(1962976921000L),1001,false));
35         billList.add(new Bill(2,2,new Date(1663062621000L),new Date(1967976921000L),500,false));
36         billList.add(new Bill(3,3,new Date(1663062621000L),null,1000,false));
37
38
39         Transaction tran = new Transaction(custList,billList);
40         tran.payBill();
41     }
42 }
43
44 }
45
```

Output:

```
eclipse-workspace - WEEKTHREE/src/third/Main.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
Console x
<terminated> Main (3) [Java Application] C:\Users\rima.das\p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64.17.0.4.v20220805-1047\jre\bin\javaw.exe (16-Sep-2022, 4:55:05 pm - 4:55:06 pm) [pid
Customer Details:
CustomerId=1, name=Tom, phone=9090901010, Acctno=1, balance=1000.0
Bill [id=1, custId=1, billGenerationDate=Mon Sep 12 15:20:21 IST 2022, billPaymentDate=Mon Mar 15 20:52:01 IST 2032, amount=1001.0, paid=false]
Bill paid for customer id 2
```