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Bank.java

```
package banking;

import banking.current.CurrAcc;
import banking.savings.SavAcc;

public class Bank {
    public static void main(String[] args) {
        //Savings Account
        SavAcc savingAcc = new SavAcc(1234, "John", 5000);
        System.out.println("-----------------FOR SAVINGS AC-
COUNT-----------------");
        System.out.println("INITIAL STATE----");
        savingAcc.display();
        System.out.println("WITHDRAWAL----");
        System.out.println("Withdrawn 100");
        savingAcc.withdraw(100);
        savingAcc.display();
        System.out.println("DEPOSITING----");
        System.out.println("Depositing 7000");
        savingAcc.deposit(7000);
        savingAcc.display();


        CurrAcc currentAcc = new CurrAcc(32432, "Will Smith",
34500);
        System.out.println("-----------------FOR CURRENT AC-
COUNT-----------------");
        System.out.println("INITIAL STATE----");
        currentAcc.display();
        System.out.println("WITHDRAWAL----");
        System.out.println("Withdrawn 4500");
        currentAcc.withdraw(4500);
        currentAcc.display();
        System.out.println("DEPOSITING----");
        System.out.println("Depositing 900");
        currentAcc.deposit(900);
        currentAcc.display();
```

```
        System.out.println("Depositing 17900");
        currentAcc.deposit(17900);
        currentAcc.display();
    }
}
```

Accounts.java

```
package banking;

public abstract class Accounts {
    int cust_id;
    String cust_name;
    double balance;

    public Accounts(int cust_id, String cust_name, double
balance) {
        this.cust_id = cust_id;
        this.cust_name = cust_name;
        this.balance = balance;
    }

    public double getBalance() {
        return balance;
    }

    public void setBalance(double balance) {
        this.balance = balance;
    }

    public int getCust_id() {
        return cust_id;
    }

    public String getCust_name() {
        return cust_name;
    }



    public abstract void display();
}
```

current/CurrAcc.java

```
package banking.current;

import banking.Accounts;

public class CurrAcc extends Accounts{

    public CurrAcc(int cust_id, String cust_name, double bal-
ance) {
        super(cust_id, cust_name, balance);
    }

    /**
     * Withdraws the indicated amount from the current ac-
count
     * requires amount is of type double and amount > 0 and
amount <= balance
     * modifies: balance
     * effects: amount is subtracted from balance, resulting
balance
     * returns: true if withdrawal successful, false other-
wise
     * @param amount
     */

    public boolean withdraw(double amount){
        double bal = this.getBalance();
        double current = bal - amount;
        if(current <= 0 || amount >= bal){
            return false;
        }else{
            this.setBalance(current);
            return true;
        }
    }

    public void deposit(double amount){
        if(amount >= 10000){
            this.setBalance(this.getBalance() + amount);
        }
    }


    @Override
    public void display() {
        System.out.println("ID:" + this.getCust_id());
```

```
        System.out.println("Name:" + this.getCust_name());
        System.out.println("Balance:" + this.getBalance());
    }

}
```

Savings/SavAcc.java

```
package banking.savings;

import banking.Accounts;

public class SavAcc extends Accounts{
    double dwl;

    public SavAcc(double dwl, int cust_id, String cust_name)
{
        super(cust_id, cust_name, 1000);
        this.dwl = 500;
    }

    public SavAcc(int cust_id, String cust_name, double bal-
ance){
        super(cust_id, cust_name, balance);
        dwl = 0.5 * balance;
    }

    public void withdraw(double amount){
        double bal = this.getBalance();
        if(bal - amount >= 1000 && amount <= dwl){
            this.setBalance(bal - amount);
        }
    }

    public void deposit(double amount){
        this.setBalance(this.getBalance() + amount);
    }

    @Override
    public void display() {
        System.out.println("ID:" + this.getCust_id());
        System.out.println("Name:" + this.getCust_name());
        System.out.println("Balance:" + this.getBalance());
    }
}
```