Banking - class & object example

```
package mypack;

public class Bank_class {
	private int account_no;  //data members or instance variable
	private int amount;
	private String customer_name;

	private Bank_class(int account_no, int amount, String customer_name)
{ //parameterized constructor
		this.account_no = account_no;  //1202
		this.amount = amount;          //2000
		this.customer_name = customer_name;  //Priya
	}

	private void deposit_amt(int deposit) {
		this.amount = this.amount+deposit;
		System.out.println("This amount "+deposit+" is deposited");
	}

	private void withdraw_amt(int withdraw) {
		//amount = amount - withdraw;
		amount -= withdraw;
		System.out.println("The amount "+withdraw+" is withdrawn");
	}
	private void print() {
		System.out.println("Account Number: "+account_no);
		System.out.println("Customer Name: "+customer_name);
		System.out.println("Amount: "+amount);
	}
	public static void main(String[] args) {
		Bank_class bc = new Bank_class(1202,2000, "Priya"); //
parametized constructor
		//System.out.println("Account Number:
"+bc.account_no+"\n"+"Customer Name: "+bc.customer_name);
		bc.print();
		bc.deposit_amt(3000);
		bc.print();
		bc.withdraw_amt(1000);
		bc.print();
	}
}
```

Output:

```
Account Number: 1202
Customer Name: Priya
Amount: 2000
This amount 3000 is deposited
Account Number: 1202
Customer Name: Priya
Amount: 5000
The amount 1000 is withdrawn
Account Number: 1202
Customer Name: Priya
Amount: 4000
```

Single Inheritance Example

```
package mypack;
class Bank{
    int account_no=1305;
    String name="Ravi";
    float amount=3000;
}
public class Single_inheritance extends Bank{

    void deposit(int amount) {
        this.amount+=amount;
    }
    void withdraw(int amount) {
        this.amount-=amount;
    }
    public static void main(String[] args) {
        Single_inheritance si = new
Single_inheritance();
        si.deposit(1000);
        System.out.println("Account Number:
"+si.account_no);
        System.out.println("Name: "+si.name);
        System.out.println("Amount: "+si.amount);
    }
}
```

```
Output:
Account Number: 1305
Name: Ravi
Amount: 4000.0
```

Multi Level Inheritance

```
package mypack;
class Test1{
    int stud_id;
    int mark1=90;
    int mark2=67;
}
class Test2 extends Test1{
    int stud_id;
    int m1=87;
    int m2=78;
}
public class Multiple_inheritance extends Test2{ //multi
level inheritance
    int total1,total2,add;
    float avg;
    public static void main(String[] args) {
        Multiple_inheritance mi = new
Multiple_inheritance();
        mi.stud_id=123;
        mi.total1=mi.mark1+mi.m1;
        mi.total2=mi.mark2+mi.m2;
        mi.add=mi.total1+mi.total2;
        mi.avg=mi.add/2;  //implicit typecasting - lower
range to higher range - int into float
        System.out.println("Student id: "+mi.stud_id);
        System.out.println("total Marks: "+mi.add);
        System.out.println("Average: "+mi.avg);
    }

}
```

```
Output:
Student id: 123
total Marks: 322
Average: 161.0
```

MultiLevel – Example 2

```
package mypack;
class Bank1{        //Parent
    int account_no=1201;
    String name="Joseph";
    int amount1=2000;
}
class Withdraw extends Bank1{   //Child1
    void withdraw_method(int amount) {
        amount1-=amount;
    }
}
class Deposit extends Withdraw{   //Child2
    void deposit_method(int amount) {
        amount1+=amount;
    }
}
public class Hierarchial_inheritance {

    public static void main(String[] args) {
        Deposit d = new Deposit();
        d.withdraw_method(100);
        d.deposit_method(1000);
        System.out.println("Account Number: 
"+d.account_no);
        System.out.println("Customer Name: "+d.name);
        System.out.println("Amount: "+d.amount1);
    }

}
```

Output:

```
Account Number: 1201
Customer Name: Joseph
Amount: 2900
```