# <u>Dashboard</u> / <u>My courses</u> / <u>CS23333-OOPUJ-2023</u> / <u>Lab-05-Inheritance</u> / <u>Lab-05-Logic Building</u>

Status	Finished
Started	Tuesday, 8 October 2024, 6:21 PM
Completed	Tuesday, 8 October 2024, 6:51 PM
Duration	30 mins 11 secs

```
Question 1
Correct
Marked out of 5.00
```

Create a class Mobile with constructor and a method basicMobile().

Create a subclass CameraMobile which extends Mobile class, with constructor and a method newFeature().

Create a subclass AndroidMobile which extends CameraMobile, with constructor and a method androidMobile().

display the details of the Android Mobile class by creating the instance. .

class Mobile{

} class CameraMobile extends Mobile {
} class AndroidMobile extends CameraMobile {
}

expected output:

Basic Mobile is Manufactured Camera Mobile is Manufactured Android Mobile is Manufactured Camera Mobile with 5MG px

Touch Screen Mobile is Manufactured

#### For example:

### Result

Basic Mobile is Manufactured Camera Mobile is Manufactured Android Mobile is Manufactured Camera Mobile with 5MG px Touch Screen Mobile is Manufactured

## Answer: (penalty regime: 0 %)

```
1 v class mobile{
 2 ,
        mobile(){
            System.out.println("Basic Mobile is Manufactured");
3
 4
 5
   }
 6 v class camera extends mobile{
7 🔻
        camera(){
            System.out.println("Camera Mobile is Manufactured");
8
9
10
        void newfeature1(){
            System.out.println("Camera Mobile with 5MG px");
11
12
13
   }
14 v class android extends camera{
15 🔻
        android(){
            System.out.println("Android Mobile is Manufactured");
16
17
        void newfeature(){
18
19
            System.out.println("Touch Screen Mobile is Manufactured");
20
21
    }
22
23
    class prog{
        public static void main(String args[]){
24
25
            android a = new android();
26
            a.newfeature1();
27
            a.newfeature();
28
29
   }
```

<b>~</b>	Basic Mobile is Manufactured	Basic Mobile is Manufactured	<b>~</b>
	Camera Mobile is Manufactured	Camera Mobile is Manufactured	
	Android Mobile is Manufactured	Android Mobile is Manufactured	
	Camera Mobile with 5MG px	Camera Mobile with 5MG px	
	Touch Screen Mobile is Manufactured	Touch Screen Mobile is Manufactured	

```
Question 2
Correct
Marked out of 5.00
```

Create a class known as "BankAccount" with methods called deposit() and withdraw().

Create a subclass called SavingsAccount that overrides the withdraw() method to prevent withdrawals if the account balance falls below one hundred.

#### For example:

```
Result

Create a Bank Account object (A/c No. BA1234) with initial balance of $500:
Deposit $1000 into account BA1234:
New balance after depositing $1000: $1500.0
Withdraw $600 from account BA1234:
New balance after withdrawing $600: $900.0
Create a SavingsAccount object (A/c No. SA1000) with initial balance of $300:
Try to withdraw $250 from SA1000!
Minimum balance of $100 required!
Balance after trying to withdraw $250: $300.0
```

Answer: (penalty regime: 0 %)

Reset answer

```
1 v class ba{
 2
        int bal;
 3
        ba(int b){
 4
            this.bal=b;
 5
 6
        void deposit(int a){
 7
            bal+=a;
 8
        void withdraw(int a){
 9
10
            bal-=a;
11
12
        int gb(){
13
            return bal;
14
15
    1}
16 v class sa extends ba{
17
        sa(int b){
18
            super(b);
19
20
        void withdraw(int a){
21
            if((bal-a)<100){
                 System.out.println("Minimum balance of $100 required!");
22
23
24
            else{
25
                 bal-=a;
26
            }
27
28
    }
29
    public class hello{
30
        public static void main(String[] args){
            ba BA1234=new ba(500);
31
32
            sa SA1000=new sa(300);
33
             System.out.println("Create a Bank Account object (A/c No. BA1234) with initial balance of $500:");
34
            System.out.println("Deposit $1000 into account BA1234:");
            BA1234.deposit(1000);
35
            System.out.println("New balance after depositing $1000: $"+BA1234.gb()+".0");
36
37
            System.out.println("Withdraw $600 from account BA1234:");
38
            BA1234.withdraw(600);
            System.out.println("New balance after withdrawing $600: $"+BA1234.gb()+".0");
39
40
            System.out.println("Create a SavingsAccount object (A/c No. SA1000) with initial balance of $300:");
41
            System.out.println("Try to withdraw $250 from SA1000!");
42
            SA1000.withdraw(250);
43
            System.out.println("Balance after trying to withdraw $250: $"+SA1000.gb()+".0");
44
45
   }
```

initial balance of \$500:  Deposit \$1000 into account BA1234:  New balance after depositing \$1000: \$1500.0  Withdraw \$600 from account BA1234:  New balance after withdrawing \$600: \$900.0  initial balance of \$500:  Deposit \$1000 into account BA1234:  New balance after depositing \$1000: \$1500  Withdraw \$600 from account BA1234:  New balance after withdrawing \$600: \$900.0		Expected	Got	
Deposit \$1000 into account BA1234:  New balance after depositing \$1000: \$1500.0  Withdraw \$600 from account BA1234:  New balance after withdrawing \$600: \$900.0  Create a SavingsAccount object (A/c No. SA1000) with initial balance of \$300:  Deposit \$1000 into account BA1234:  New balance after depositing \$1000: \$1500  Withdraw \$600 from account BA1234:  New balance after withdrawing \$600: \$900.0  Create a SavingsAccount object (A/c No. SA1000) with initial balance of \$300:	/	Create a Bank Account object (A/c No. BA1234) with	Create a Bank Account object (A/c No. BA1234) with	~
New balance after depositing \$1000: \$1500.0  Withdraw \$600 from account BA1234:  New balance after withdrawing \$600: \$900.0  Create a SavingsAccount object (A/c No. SA1000) with initial balance of \$300:  New balance after depositing \$1000: \$1500.0  Withdraw \$600 from account BA1234:  New balance after withdrawing \$600: \$900.0  Create a SavingsAccount object (A/c No. SA1000) with initial balance of \$300:		initial balance of \$500:	initial balance of \$500:	
Withdraw \$600 from account BA1234:  New balance after withdrawing \$600: \$900.0  Create a SavingsAccount object (A/c No. SA1000) with initial balance of \$300:  Withdraw \$600 from account BA1234:  New balance after withdrawing \$600: \$900.0  Create a SavingsAccount object (A/c No. SA1000) with initial balance of \$300:		Deposit \$1000 into account BA1234:	Deposit \$1000 into account BA1234:	
New balance after withdrawing \$600: \$900.0  Create a SavingsAccount object (A/c No. SA1000) with initial balance of \$300:  New balance after withdrawing \$600: \$900.0  Create a SavingsAccount object (A/c No. Sa1000) with initial balance of \$300:		New balance after depositing \$1000: \$1500.0	New balance after depositing \$1000: \$1500.0	
Create a SavingsAccount object (A/c No. SA1000) with initial balance of \$300:		Withdraw \$600 from account BA1234:	Withdraw \$600 from account BA1234:	
initial balance of \$300: initial balance of \$300:		New balance after withdrawing \$600: \$900.0	New balance after withdrawing \$600: \$900.0	
		Create a SavingsAccount object (A/c No. SA1000) with	Create a SavingsAccount object (A/c No. SA1000) with	
Try to withdraw \$250 from SA1000!  Try to withdraw \$250 from SA1000!		initial balance of \$300:	initial balance of \$300:	
		Try to withdraw \$250 from SA1000!	Try to withdraw \$250 from SA1000!	
Minimum balance of \$100 required!		Minimum balance of \$100 required!	Minimum balance of \$100 required!	
Balance after trying to withdraw \$250: \$300.0 Balance after trying to withdraw \$250: \$		Balance after trying to withdraw \$250: \$300.0	Balance after trying to withdraw \$250: \$300.0	

```
Question 3
Correct
Marked out of 5.00
```

create a class called College with attribute String name, constructor to initialize the name attribute, a method called Admitted(). Create a subclass called CSE that extends Student class, with department attribute, Course() method to sub class. Print the details of the Student.

College:

String collegeName;

public College() { }

public admitted() { }

Student:

String studentName;

String department;

public Student(String collegeName, String studentName,String depart) { }

public toString()

**Expected Output:** 

A student admitted in REC

CollegeName : REC

StudentName : Venkatesh

Department : CSE

### For example:

```
Result

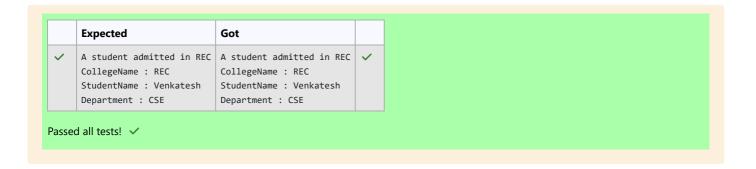
A student admitted in REC
CollegeName : REC
StudentName : Venkatesh
Department : CSE
```

Answer: (penalty regime: 0 %)

Reset answer

```
class College
 1
 2 v
               String collegeName;
    protected
4
 5
    public College(String collegeName) {
        this.collegeName=collegeName;
 6
 7
8
9
    public void admitted() {
10
        System.out.println("A student admitted in "+collegeName);
11
12
13
    class Student extends College{
14
15
   String studentName;
16
    String department;
17
18
    public Student(String collegeName, String studentName,String depart) {
19
        super(collegeName);
20
        this.studentName=studentName;
21
        this.department=depart;
   }
22
23
    public String toString(){
24
        return "CollegeName: "+collegeName+"\n"+"StudentName: "+studentName+"\n"+"Department: "+department;
25
26
27
28
29
   class prog {
30 public static void main (String[] args) {
            Student s1 = new Student("REC","Venkatesh","CSE");
31
32
            s1.admitted();
                                                          // invoke the admitted() method
33
            System.out.println(s1.toString());
34
```

35 }



### ■ Lab-05-MCQ

Is Palindrome Number? ►

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