# <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	Wednesday, 9 October 2024, 10:24 AM
Completed	Wednesday, 9 October 2024, 11:29 AM
Duration	1 hour 4 mins

www.rajalakshmicolleges.org/moodle/mod/quiz/review.php? attempt = 15744&cmid = 267

```
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
```

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 •
        public Mobile(){
3
            System.out.println("Basic Mobile is Manufactured");
 4
        public void basicMobile(){
 5
            System.out.println("Basic Mobile is Manufactured");
 6
 7
8
9 v class CameraMobile extends Mobile{
10 •
        public CameraMobile(){
11
            System.out.println("Camera Mobile is Manufactured");
12
13
        public void newFeature(){
14
            System.out.println("Camera Mobile with 5MG px");
15
16
17
18 v class AndroidMobile extends CameraMobile{
19
20 ,
        public AndroidMobile(){
21
            System.out.println("Android Mobile is Manufactured");
22
23
        public void androidMobile(){
24
25
            System.out.println("Touch Screen Mobile is Manufactured");
26
27
28
    public class Main{
29
        public static void main(String a[]){
30
            AndroidMobile am=new AndroidMobile();
31
            am.newFeature();
            am.androidMobile();
32
33
34
25
```

ر در

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

Passed all tests! 🗸

11

```
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 BankAccount {
 2
        private String accountNumber;
 3
        private double balance;
 4
        public BankAccount(String accountNumber,double balance){
 5
            this.accountNumber=accountNumber;
 6
            this.balance=balance;
 8 ,
        public void deposit(double amount) {
 9
            balance+=amount;
10
            int amount1=(int)amount;
            System.out.println("New balance after depositing $"+amount1+": $"+balance);
11
12
13
        public void withdraw(double amount) {
14
            if (balance >= amount) {
                balance -= amount;
15
16
                 int amount2=(int)amount;
                 System.out.println("New balance after withdrawing $"+amount2+ ": $"+balance);
17
18
            } else {
                 System.out.println("Insufficient balance");
19
20
21
        }
22
23
        public double getBalance() {
24
25
            return balance;
26
27
28
29
     class SavingsAccount extends BankAccount {
30
        public SavingsAccount(String accountNumber, double balance) {
31
32
            super(accountNumber,balance);
33
34
        @Override
35
        public void withdraw(double amount) {
36
            // Check if the withdrawal would cause the balance to drop below $100
37
            if (getBalance() - amount < 100) {</pre>
38
39
                 System.out.println("Minimum balance of $100 required!");
40
            } else {
41
                 // Call the parent class withdraw method
                 super.withdraw(amount);
42
43
            }
44
        }
45
    }
46
47 v public class Main {
48
        nublic static void main(String[] args) {
```

```
// Print message to indicate creation of a BankAccount object

System.out.nrintln("Create a Bank Account object (A/c No. BA1234) with initial halanger
50
51
52
```

	Expected	Got	
~	Create a Bank Account object (A/c No. BA1234) with	Create a Bank Account object (A/c No. BA1234) with	~
	initial balance of \$500:	initial balance of \$500:	
	Deposit \$1000 into account BA1234:	Deposit \$1000 into account BA1234:	
	New balance after depositing \$1000: \$1500.0	New balance after depositing \$1000: \$1500.0	
	Withdraw \$600 from account BA1234:	Withdraw \$600 from account BA1234:	
	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	
	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!	
	Balance after trying to withdraw \$250: \$300.0	Balance after trying to withdraw \$250: \$300.0	

Passed all tests! <

11

```
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.

```
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
```

### For example:

Department: CSE

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

Answer: (penalty regime: 0 %)

```
Reset answer
```

```
class College
1
2 ▼ {
   protected
               String collegeName;
4
5
   public College(String collegeName) {
        // initialize the instance variables
6
7
        this.collegeName=collegeName;
8
9
10 v public void admitted() {
11
        System.out.println("A student admitted in "+collegeName);
12
   }
13
14 v class Student extends College{
15
   String college;
16
   String studentName;
17
   String department;
18
19 v public Student(String college, String studentName, String depart) {
20
       // initialize the instance variables
21
       super(college);
       this.college=college;
22
       this.studentName=studentName;
23
24
       this.department=depart;
25
26
27
   public void details(){
28
        System.out.println("A student admitted in REC");
29
30
        System.out.println("CollegeName : "+this.college);
        System.out.println("StudentName : "+this.studentName);
31
32
        System.out.println("Department : "+this.department);
33
34
```

	Expected	Got	
~	A student admitted in REC CollegeName : REC StudentName : Venkatesh Department : CSE	A student admitted in REC CollegeName : REC StudentName : Venkatesh Department : CSE	<b>~</b>

Passed all tests! <

### ■ Lab-05-MCQ

Jump to...

Is Palindrome Number? ►

11