

[Dashboard](#) / [My courses](#) / [CS23333-OOPJ-2023](#) / [Lab-05-Inheritance](#) / [Lab-05-Logic Building](#)

<b>Status</b>	Finished
<b>Started</b>	Sunday, 6 October 2024, 2:25 PM
<b>Completed</b>	Sunday, 6 October 2024, 2:30 PM
<b>Duration</b>	5 mins 41 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 class mob{
2
3     mob(){
4
5         System.out.println("Basic Mobile is Manufactured");
6     }
7     void basmob(){
8         System.out.println("Basic Mobile is Manufactured");
9     }
10 }
11 class cam extends mob{
12     cam(){
13         super();
14         System.out.println("Camera Mobile is Manufactured");
15     }
16     void newm(){
17         System.out.println("Camera Mobile with 5MG px");
18     }
19 }
20 }
21 class and extends cam{
22     and(){
23         super();
24         System.out.println("Android Mobile is Manufactured");
25     }
26     void andmob(){
27
28         System.out.println("Touch Screen Mobile is Manufactured");
```

```
29 |
30 |     }
31 | }
32 | public class Main{
33 |     public static void main(String[] args){
34 |         and andmob=new and();
35 |         andmob.newm();
36 |         andmob.andmob();
37 |     }
38 |
39 | }
```

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

Passed all tests! ✓



## 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 class BankAccount {  
2  
3     // Private field to store the account number  
4  
5     private String accountNumber;  
6  
7     // Private field to store the balance  
8     private double balance;  
9  
10    // Constructor to initialize account number and balance  
11    public BankAccount(String accountNumber, double balance){  
12        this.accountNumber=accountNumber;  
13        this.balance=balance;  
14    }  
15  
16  
17  
18  
19    // Method to deposit an amount into the account  
20    public void deposit(double amount) {  
21        // Increase the balance by the deposit amount  
22        balance+=amount;  
23    }  
24  
25    // Method to withdraw an amount from the account  
26    public void withdraw(double amount) {  
27        // Check if the balance is sufficient for the withdrawal  
28        if (balance >= amount) {  
29            // Decrease the balance by the withdrawal amount  
30            balance -= amount;  
31        } else {  
32            // Print a message if the balance is insufficient  
33            System.out.println("Insufficient balance");  
34        }  
35    }  
36  
37    // Method to get the current balance  
38    public double getBalance() {  
39        // Return the current balance  
40        return balance;  
41    }  
42 }
```

```
43
44 public String getAccountNumber(){
45     return accountNumber;
46 }
47 }
48 class SavingsAccount extends BankAccount {
49     // Constructor to initialize account number and balance
50 public SavingsAccount(String accountNumber, double balance) {
51     // Call the parent class constructor
52     super(accountNumber,balance);
```

	Expected	Got	
✓	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	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	✓

Passed all tests! ✓



## 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

```

1  class College
2
3  {
4
5      public String collegeName;
6
7      public College(String collegeName) {
8          // initialize the instance variables
9          this.collegeName=collegeName;
10     }
11
12     public void admitted() {
13         System.out.println("A student admitted in "+collegeName);
14     }
15 }
16 class Student extends College{
17
18     String studentName;
19     String department;
20
21     public Student(String collegeName, String studentName,String department) {
22         // initialize the instance variables
23         super(collegeName);
24         this.studentName=studentName;
25         this.department=department;
26     }
27
28 }
```

```
28 |
29 |
30 | public String toString(){
31 |     // return the details of the student
32 |     return "CollegeName : "+collegeName+"\n"+"StudentName : "+studentName+"\n"+"Department : "+department;
33 | }
34 |
35 | public class Main {
36 |     public static void main (String[] args) {
37 |         Student s1 = new Student("REC","Venkatesh","CSE");
38 |         s1.admitted(); // invoke the admitted() method
39 |         System.out.println(s1.toString());
40 |     }
41 | }
```

	Expected	Got	
✓	A student admitted in REC CollegeName : REC StudentName : Venkatesh Department : CSE	A student admitted in REC CollegeName : REC StudentName : Venkatesh Department : CSE	✓

Passed all tests! ✓

◀ Lab-05-MCQ

Jump to...

[Is Palindrome Number? ▶](#)

