<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, 10:43 AM
Completed	Wednesday, 9 October 2024, 11:50 AM
Duration	1 hour 6 mins

```
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 %)

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

	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! 🗸

```
Question 2
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
        protected String collegeName;
 3 ,
        public College(String collegeName){
 4
            this.collegeName=collegeName;
        public void admitted() {
 6
            System.out.println("A student admitted in "+collegeName);
 7
 8
9
10
    class Student extends College{
11
        String studentName;
12
        String depart;
13
        public Student(String collegeName, String studentName, String depart){
14
            super(collegeName);
            this.studentName=studentName;
15
16
            this.depart=depart;
17
18
19
        public String toString(){
            return "CollegeName : "+ collegeName+'\n'+
20
            "StudentName : "+ studentName +'\n'+
21
            "Department : "+ depart + "\n";
22
23
24
25
    public class Main {
26
    public static void main (String[] args) {
27
            Student s1 = new Student("REC","Venkatesh","CSE");
28
            s1.admitted();
29
            System.out.println(s1.toString());
30
31
```

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

Passed all tests! 🗸

```
Question 3
Incorrect
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

```
class BankAccount {
 1 •
 2
        // Private field to store the account number
        private String accountNumber;
 3
 Δ
        // Private field to store the balance
 5
        private double balance;
        // Constructor to initialize account number and balance
 6
        public BankAccount(String accountNumber,double balance) {
 8
            this.accountNumber=accountNumber;
 9
            this.balance=balance;
10
        // Method to deposit an amount into the account
11
12
        public void deposit(double amount) {
13
            balance+=amount;
14
15
        // Method to withdraw an amount from the account
16
        public void withdraw(double amount) {
17
            // Check if the balance is sufficient for the withdrawal
18
            if (balance >= amount) {
19
                 // Decrease the balance by the withdrawal amount
20
                balance -= amount;
21
            } else {
22
                // Print a message if the balance is insufficient
23
                System.out.println("Insufficient balance");
24
            }
25
        // Method to get the current balance
26
        public double getBalance() {
27
28
            return balance;
29
30
    }
31
32
     class SavingsAccount extends BankAccount {
        // Constructor to initialize account number and balance
33
34
        public SavingsAccount(String accountNumber, double balance) {
35
            // Call the parent class constructor
36
            super(accountNumber,balance);
37
        // Override the withdraw method from the parent class
38
39
40
        public void withdraw(double amount) {
41
            // Check if the withdrawal would cause the balance to drop below $100
42
            if (getBalance() - amount < 100) {</pre>
43
                 // Print a message if the minimum balance requirement is not met
                 System.out.println("Minimum balance of $100 required!");
44
45
            } else {
46
                 // Call the parent class withdraw method
                super.withdraw(amount);
47
48
            }
49
        }
50
    }
51
```

```
52 y|public class Main {
```

```
Syntax Error(s)
```

```
Main.java:64: error: cannot find symbol
System.out.println("New balance after depositing $1000: "+ amount +": $"+ BA1234.getBalance());

symbol: variable amount
location: class Main
1 error
```

◄ Lab-05-MCQ

Jump to...

Is Palindrome Number? ►