<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	Sunday, 27 October 2024, 5:56 PM
Completed	Sunday, 27 October 2024, 7:08 PM
Duration	1 hour 12 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 CameraMobile 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
```

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

Basic Mobile is Manufactured Camera Mobile is Manufactured Android 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

 ${\sf CollegeName:REC}$

Student Name: 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
 2
    protected String collegeName;
 3
 4
 5
    public College(String collegeName) {
 6
        // initialize the instance variables
        this.collegeName=collegeName;
 7
 8
9
10
    public void admitted() {
        System.out.println("A student admitted in "+collegeName);
11
12
13
    class Student extends College{
14
15
    String studentName;
16
17
    String depart;
18
19
    public Student(String collegeName, String studentName, String depart) {
20
       // initialize the instance variables
21
       super(collegeName);
22
       this.studentName=studentName;
23
       this.depart=depart;
24
25
26
27
    public String toString(){
28
        // return the details of the student
29
        return"CollegeName : "+collegeName+"\nStudentName : "+studentName+"\nDepartment : "+depart;
30
31
32
    class prog {
33
    public static void main (String[] args) {
34
            Student s1 = new Student("REC"," Venkatesh"," CSE");
35
             s1.admitted();
                                                           // invoke the admitted() method
36
            System.out.println(s1.toString());
37
38
```

```
Question 3

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
        // Private field to store the account number
 3
        private String accountNumber;
 4
 5
        // Private field to store the balance
        private double balance:
 6
        public BankAccount(String accountNumber,double balance){
 7
 8
            this.accountNumber=accountNumber;
 9
            this.balance=balance;
10
11
        // Constructor to initialize account number and balance
12
13
14
15
16
17
18
        // Method to deposit an amount into the account
        public void deposit(double amount) {
19
20
            balance+=amount;
            \ensuremath{//} Increase the balance by the deposit amount
21
22
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 balance;
             // Return the current balance
40
41
42
43
44
45
     class SavingsAccount extends BankAccount {
46
        // Constructor to initialize account number and balance
47
        public SavingsAccount(String accountNumber, double balance) {
48
             // Call the parent class constructor
49
            super(accountNumber,balance);
50
51
52
```

	Expected	Got	
/	Create a Bank Account object (A/c No. BA1234) with initial	Create a Bank Account object (A/c No. BA1234) with initial	~
	balance of \$500:	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 initial	Create a SavingsAccount object (A/c No. SA1000) with initial	
	balance of \$300:	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	

◄ Lab-05-MCQ

Is Palindrome Number? ►