<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, 6 October 2024, 10:29 PM
Completed	Sunday, 6 October 2024, 10:33 PM

```
Question 1
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 field to store the account number
 3
        private String accountNumber;
 4
 5
        // Private field to store the balance
 6
        private double balance;
 8
        // Constructor to initialize account number and balance
 9
        public BankAccount(String accountNumber,double balance){
10
            this.accountNumber=accountNumber;
11
            this.balance=balance;
12
        }
13
14
15
16
17
        // Method to deposit an amount into the account
        public void deposit(double amount) {
18
            // Increase the balance by the deposit amount
19
         balance+=amount;
20
21
22
        // Method to withdraw an amount from the account
23
24
        public void withdraw(double amount) {
25
            // Check if the balance is sufficient for the withdrawal
26
            if (balance >= amount) {
27
                 // Decrease the balance by the withdrawal amount
28
                balance -= amount:
29
            } else {
                 // Print a message if the balance is insufficient
30
                 System.out.println("Insufficient balance");
31
32
            }
33
34
35
        // Method to get the current balance
36
        public double getBalance() {
37
            // Return the current balance
38
            return balance;
39
40
        public String getAccountNumber(){
41
            return accountNumber;
42
43
44
    class SavingsAccount extends BankAccount {
45
        // Constructor to initialize account number and balance
46
        public SavingsAccount(String accountNumber, double balance) {
47
            // Call the parent class constructor
48
            super(accountNumber,balance);
49
```

50
51 // Override the withdraw method from the parent class
52 @Override

	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! <

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```
Question 2
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
```

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

Android Mobile is Manufactured Camera Mobile with 5MG px

Touch Screen Mobile is Manufactured

Answer: (penalty regime: 0 %)

```
1 v class mob{
2 •
        mob(){
            System.out.println("Basic Mobile is Manufactured");
3
 4
        void basmob(){
 5
            System.out.println("Basic Mobile is Manufactured");
 6
 7
8
   }
9 v class cam extends mob{
10 •
        cam(){
11
            super();
            System.out.println("Camera Mobile is Manufactured");
12
13
        void newm(){
14
            System.out.println("Camera Mobile with 5MG px");
15
16
17
18
19
    class and extends cam{
20
        and(){
21
        super();
        System.out.println("Android Mobile is Manufactured");
22
23
        void andmob(){
24
25
            System.out.println("Touch Screen Mobile is Manufactured");
26
27
28
    public class Main{
29
        public static void main(String[]args){
30
            and andmob=new and();
31
            andmob.newm();
32
            andmob.andmob();
33
34
25
```

36

	Expected	Got	
~	Basic Mobile is Manufactured	Basic Mobile is Manufactured	~
	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	

Passed all tests! 🗸

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

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

Passed all tests! ✓

■ Lab-05-MCQ

Jump to...

Is Palindrome Number? ►

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