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Status	Finished
Started	Thursday, 3 October 2024, 10:32 PM
Completed	Thursday, 3 October 2024, 11:07 PM
Duration	34 mins 49 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 Mobile{
2     public Mobile(){
3         System.out.println("Basic Mobile is Manufactured");
4     }
5 }
6 class CameraMobile extends Mobile{
7     public CameraMobile(){
8         System.out.println("Camera Mobile is Manufactured");
9     }
10    public void newFeature(){
11        System.out.println("Camera Mobile with 5MG px");
12    }
13 }
14 class AndroidMobile extends CameraMobile{
15     public AndroidMobile(){
16         System.out.println("Android Mobile is Manufactured");
17     }
18     public void androidMobile(){
19         System.out.println("Touch Screen Mobile is Manufactured");
20     }
21 }
22 class prog{
23     public static void main(String[] args){
24         AndroidMobile am = new AndroidMobile();
25         am.newFeature();
26         am.androidMobile();
27     }
28 }
```

	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     // Private field to store the account number
3     private String accountNumber;
4
5     // Private field to store the balance
6     private double balance;
7
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
18     // Method to deposit an amount into the account
19     public void deposit(int amount) {
20         // Increase the balance by the deposit amount
21         if(amount>0){
22             balance += amount;
23             System.out.println("New balance after depositing $" + amount + ": $" + balance);
24         }
25         else{
26             System.out.println("The deposited amount must be positive");
27         }
28     }
29
30
31     // Method to withdraw an amount from the account
32     public void withdraw(double amount) {
33         // Check if the balance is sufficient for the withdrawal
34         if (balance >= amount) {
35             // Decrease the balance by the withdrawal amount
36             balance -= amount;
37         } else {
38             // Print a message if the balance is insufficient
39             System.out.println("Insufficient balance");
40         }
41     }
42
43     // Method to get the current balance
44     public double getBalance() {
45         // Return the current balance
46         return balance;
47     }
48 }
49
50
51 class SavingsAccount extends BankAccount {
52     // Constructor to initialize account number and balance
```

	Expected	Got	
✓	<p>Create a Bank Account object (A/c No. BA1234) with initial balance of \$500:</p> <p>Deposit \$1000 into account BA1234:</p> <p>New balance after depositing \$1000: \$1500.0</p> <p>Withdraw \$600 from account BA1234:</p> <p>New balance after withdrawing \$600: \$900.0</p> <p>Create a SavingsAccount object (A/c No. SA1000) with initial balance of \$300:</p> <p>Try to withdraw \$250 from SA1000!</p> <p>Minimum balance of \$100 required!</p> <p>Balance after trying to withdraw \$250: \$300.0</p>	<p>Create a Bank Account object (A/c No. BA1234) with initial balance of \$500:</p> <p>Deposit \$1000 into account BA1234:</p> <p>New balance after depositing \$1000: \$1500.0</p> <p>Withdraw \$600 from account BA1234:</p> <p>New balance after withdrawing \$600: \$900.0</p> <p>Create a SavingsAccount object (A/c No. SA1000) with initial balance of \$300:</p> <p>Try to withdraw \$250 from SA1000!</p> <p>Minimum balance of \$100 required!</p> <p>Balance after trying to withdraw \$250: \$300.0</p>	✓

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

```
42 |         s1.admitted();
43 |         System.out.println(s1.toString());
44 |     }
45 | }
```

	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

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