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|------------------|-------------------------------------|
| Status | Finished |
| Started | Wednesday, 2 October 2024, 10:21 PM |
| Completed | Wednesday, 2 October 2024, 10:39 PM |
| Duration | 17 mins 35 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
4         System.out.println("Basic Mobile is Manufactured");
5     }
6 }
7 class CameraMobile extends Mobile{
8
9     public CameraMobile(){
10         System.out.println("Camera Mobile is Manufactured");
11     }
12     public void newFeature(){
13         System.out.println("Camera Mobile with 5MG px");
14     }
15 }
16
17 class AndroidMobile extends CameraMobile{
18     public AndroidMobile(){
19         System.out.println("Android Mobile is Manufactured");
20     }
21     void androidMobile(){
22         System.out.println("Touch Screen Mobile is Manufactured");
23     }
24 }
25
26 class prog{
27     public static void main(String[] args){
28         AndroidMobile o=new AndroidMobile();
29         o.newFeature();
30         o.androidMobile();
31     }
32 }
```

| | 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 String accountNumber;
3     private double balance;
4
5     public BankAccount(String accountNumber, double balance){
6         this.accountNumber=accountNumber;
7         this.balance=balance;
8     }
9
10    // Method to deposit an amount into the account
11    public void deposit(double amount) {
12        // Increase the balance by the deposit amount
13        balance+=amount;
14    }
15
16
17    public void withdraw(double amount) {
18        if (balance >= amount) {
19            balance -= amount;
20        } else {
21            System.out.println("Insufficient balance");
22        }
23    }
24
25    // Method to get the current balance
26    public double getBalance() {
27        // Return the current balance
28        return balance;
29    }
30 }
31
32
33 class SavingsAccount extends BankAccount {
34     // Constructor to initialize account number and balance
35     public SavingsAccount(String accountNumber, double balance) {
36         // Call the parent class constructor
37         super(accountNumber,balance);
38     }
39
40
41    // Override the withdraw method from the parent class
42    @Override
43    public void withdraw(double amount) {
44        // Check if the withdrawal would cause the balance to drop below $100
45        if (getBalance() - amount < 100) {
46            // Print a message if the minimum balance requirement is not met
47            System.out.println("Minimum balance of $100 required!");
48        } else {
49            // Call the parent class withdraw method
50            super.withdraw(amount);
51        }
52    }
53 }
```

| | 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 collegeNameP) {
6 |         // initialize the instance variables
7 |         collegeName= collegeNameP;
8 |     }
9 |
10 |    public void admitted() {
11 |        System.out.println("A student admitted in "+collegeName);
12 |    }
13 | }
14 | class Student extends College{
15 |
16 |     String studentName;
17 |     String depart;
18 |
19 |     public Student(String collegeNameP, String studentNameP,String departP) {
20 |         // initialize the instance variables
21 |         super(collegeNameP);
22 |         studentName=studentNameP;
23 |         depart=departP;
24 |
25 |
26 |
27 |     }
28 |
29 |     public String toString(){
30 |         // return the details of the student
31 |         return "CollegeName : "+collegeName+"\nStudentName : "+studentName+"\nDepartment : "+depart ;
32 |     }
33 | }
34 | class prog {
35 |     public static void main (String[] args) {

```

```
36 | Student s1 = new Student("REC", "Venkatesh", "CSE");
37 |
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! ✓

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