

CS23333-Object Oriented Programming Using Java-2023

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Status	Finished
Started	Saturday, 5 October 2024, 12:33 PM
Completed	Saturday, 5 October 2024, 1:14 PM
Duration	41 mins 55 secs

Question 1

Correct

Marked out of 5.00

Flag question

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         this.collegeName=collegeName;
7     }
8
9     public void admitted() {
10        System.out.println("A student admitted in "+collegeName);
11    }
12 }
13 class Student extends College{
14     String studentName;
15     String department;
16
17     public Student(String collegeName, String studentName,String depart) {
18         super(collegeName);
19         this.studentName=studentName;
20         this.department=depart;
21     }
22
23     public String toString(){
24         return "CollegeName : "+collegeName+"\nStudentName : "+studentName+"\nDepartment : "+department;
25     }
26 }
27
28 class prog {
29     public static void main (String[] args) {
30         Student s1 = new Student("REC","Venkatesh","CSE");
31         s1.admitted();
32         System.out.println(s1.toString());
33     }
34 }
```

	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! ✓

Question 2

Correct

Marked out of 5.00

Flag question

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     public BankAccount(String bankAccount,double balance){
5         this.accountNumber=bankAccount;
6         this.balance=balance;
7     }
8     public void deposit(double amount) {
9         // Increase the balance by the deposit amount
10        balance+=amount;
11    }
12    public void withdraw(double amount) {
13        if (balance >= amount) {
14            balance -= amount;
15        } else {
16            System.out.println("Insufficient balance");
17        }
18    }
19    public double getBalance() {
20        return balance;
21    }
22 }
```

```

21     }
22 }
23
24 class SavingsAccount extends BankAccount {
25     // Constructor to initialize account number and balance
26     public SavingsAccount(String accountNumber, double balance) {
27         // Call the parent class constructor
28         super(accountNumber, balance);
29     }
30
31     // Override the withdraw method from the parent class
32     @Override
33     public void withdraw(double amount) {
34         // Check if the withdrawal would cause the balance to drop below $100
35         if (getBalance() - amount < 100) {
36             // Print a message if the minimum balance requirement is not met
37             System.out.println("Minimum balance of $100 required!");
38         } else {
39             // Call the parent class withdraw method
40             super.withdraw(amount);
41         }
42     }
43 }
44
45 class prog {
46
47     public static void main(String[] args) {
48         System.out.println("Create a Bank Account object (A/c No. BA1234) with initial balance of $500.");
49         BankAccount BA1234 = new BankAccount("BA1234", 500);
50         System.out.println("Deposit $1000 into account BA1234:");
51         BA1234.deposit(1000);
52         System.out.println("New balance after depositing $1000: $" + BA1234.getBalance());

```

	Expected	Got	
✓	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	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	✓

Passed all tests! ✓

Question 3
Correct
Marked out of 5.00
Flag question

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         //super();
10    }
11    public void newFeature(){
12        System.out.println("Camera Mobile with 5MG px");
13    }
14 }
15 class AndroidMobile extends CameraMobile{
16     public AndroidMobile(){
17         System.out.println("Android Mobile is Manufactured");
18         //super();
19    }
20    public void androidMobile(){
21        System.out.println("Touch Screen Mobile is Manufactured");
22    }
23 }
24 class prog{
25     public static void main(String args[]){
26         AndroidMobile am=new AndroidMobile();
27         am.newFeature();
28         am.androidMobile();
29     }
30 }

```

	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! ✓

Finish review