

Standard Template for Academic Tasks (22232)



Faculty Name and UID: Girish Kumar

UID: 21706

Student Name: Mitesh Kumar

Academic Task Number: CA-4

Course code: CAP680

Course Title Programme: Programming in JAVA (Lab)

Maximum Marks: 50

Academic Task Type: Assignment

Reg.No_12205399

Roll No__A05

Section__D2214 Group _1

Date of Allotment: 20-Feb-2023

Last Date of submission:26-Feb-2023

Set: Odd

Question Number	Question Statement	Course Outcome	Bloom's level	Marks per Question
1	<p>Swati bought 600 shares of stock at a price of Rs.21.77 per share. She must pay her stock broker a 2% commission for the transaction. Construct a program using class, object and methods that the display the following:</p> <ul style="list-style-type: none"> -The amount paid for the stock alone (without the commission) -The amount of the commission -The total amount paid 	CO1	L6	50

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```
public class StockTransaction {  
    int numShares;  
    double pricePerShare;  
    double commissionRate;  
  
    public StockTransaction(int numShares, double pricePerShare, double commissionRate) {  
        this.numShares = numShares;  
        this.pricePerShare = pricePerShare;  
        this.commissionRate = commissionRate;  
    }  
  
    public double calculateStockAmount() {  
        return numShares * pricePerShare;  
    }  
  
    public double calculateCommission() {  
        return calculateStockAmount() * commissionRate / 100;  
    }  
}
```

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```
}

public double calculateTotalAmount() {
    return calculateStockAmount() + calculateCommission();
}

public static void main(String[] args) {
    StockTransaction transaction = new StockTransaction(600, 21.77, 2);
    System.out.println("Amount paid for the stock alone (without the commision): Rs. " + transaction.calculateStockAmount());
    System.out.println("Commission paid to the broker: Rs. " + transaction.calculateCommission());
    System.out.println("Total amount paid: Rs. " + transaction.calculateTotalAmount());
}
}
```

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OUTPUT:

```
File Edit View Navigate Code Refactor Build Run Tools VCS Window Help Programs.java - StockTransaction.java
Programs.java > src > StockTransaction > calculateCommission
Project
  Programs.java F:\Java Program
    .idea
    Hello.java
    .idea
    out
    src
    Hello.java.iml
StockTransaction.java X
  12 public double calculateStockAmount() {
  13     return numShares * pricePerShare;
  14 }
  15
  16 public double calculateCommission() {
  17     return calculateStockAmount() * commissionRate / 100;
  18 }
  19
Run: StockTransaction X
"C:\Program Files\Java\jdk-19\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2022.3.1\lib\idea_rt.jar=56134:C:\Program Files\JetBrains\I
Amount paid for the stock alone (without the commision): Rs. 13062.0
Commission paid to the broker: Rs. 261.24
Total amount paid: Rs. 13323.24
Process finished with exit code 0
Version Control Run TODO Problems Terminal Services Build
Build completed successfully in 5 sec, 479 ms (a minute ago)
18:6 CRLF UTF-8 4 spaces
21°C Haze 76 ENG 10:09 PM 2/25/2023
```