

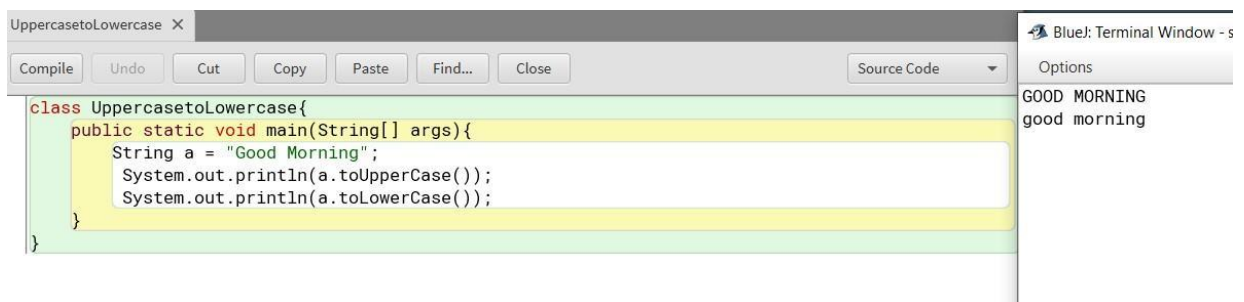
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**(L4CG5)**

**Group A**

1. What is the String class in Java? Is String a data type?

The String class are character . All string literals in Java programs, such as "abc" , are implemented as instances of this class. String is non-primitive data type.

2. How can you make a String upper case or lower case in Java?



```
class UppercasetoLowercase{
    public static void main(String[] args){
        String a = "Good Morning";
        System.out.println(a.toUpperCase());
        System.out.println(a.toLowerCase());
    }
}
```

GOOD MORNING  
good morning

3. Can you use String in switch case in Java? Explain it briefly.

Yes, we can use String in switch case in Java. Below is the example;

The screenshot shows a Java IDE with a source code editor on the left and a terminal window on the right. The source code is a Java class named `SwitchCase` with a `main` method. It uses a `Scanner` to read input and a `switch` statement to print the name of a student based on a number. The terminal window shows the program's execution, where the user enters numbers 0, 1, 2, 3, 4, and the program outputs the corresponding student names or 'Student is absent'.

```
import java.util.*;
class SwitchCase{
    public static void main(String[] args){
        System.out.println("Enter a number: ");
        Scanner sc=new Scanner(System.in);

        String student = sc.next();
        switch (student){
            case "1":
                System.out.println("The Student is Harry.");
                break;
            case "2":
                System.out.println("The Student is Ronny.");
                break;
            case "3":
                System.out.println("The Student is Tommy. ");
                break;
            case "4":
                System.out.println("The Student is Becky. ");
                break;
            default:
                System.out.println("Student is absent");
                break;
        }
    }
}
```

Options

Enter a number:  
0  
Student is absent  
Enter a number:  
1  
The Student is Harry.  
Enter a number:  
2  
The Student is Ronny.  
Enter a number:  
3  
The Student is Tommy.  
Enter a number:  
4  
The Student is Becky.

Can only enter input while your progr

#### 4. Explain different types of conditional statement in java.

If statement is a type of statement in which a program is executed if the condition is true.

Else statement is a type of statement in which a program is executed if the condition is false.

Else if statement is a type of statement in which a program specifies a new condition if the first condition is false.

5. What is the value of the variable num after the following isexecuted?

○ int k = 5; ○ int num  
= 0; ○ int num1 = num +  
k \* 2; ○ int num2 = num  
+ k \* 2;



```
class Valueifvariable{
    public static void main(String[] args){
        int k=5;
        int num=0;
        int num1=num+k*2;
        int num2=num+k*2;
        System.out.println("The value of num1 is:"+num1);
        System.out.println("The value of num2 is:"+num2);
    }
}
```

The value of num1 is:10  
The value of num2 is:10

Are the values num1 and num2 equal after the last statement?

Yes, the value of num1 and num2 is equal.

6. How do you split a string in Java?



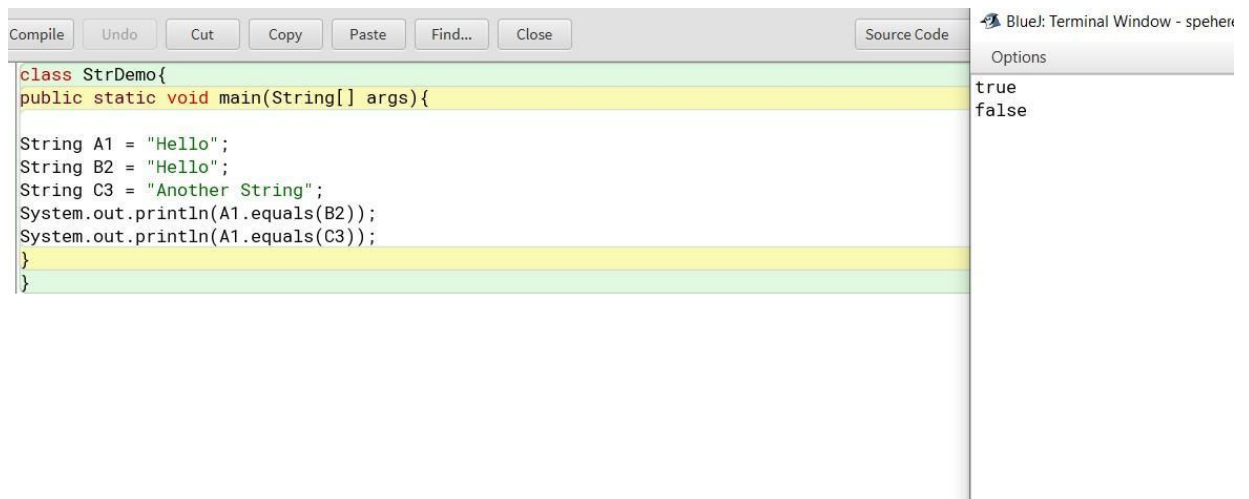
```
class Split {
    public static void main(String[] args) {
        String text = "Java is a programming language";

        String[] result = text.split(" ");

        System.out.print("result = ");
        for (String str : result) {
            System.out.print(str + " ");
        }
    }
}
```

result = Java, is, a, programming, language,

## 7. How do you check if two Strings are equal in Java?



```
class StrDemo{
public static void main(String[] args){


String A1 = "Hello";
String B2 = "Hello";
String C3 = "Another String";
System.out.println(A1.equals(B2));
System.out.println(A1.equals(C3));
}
}
```

Options

true  
false

### Group B

1. Find the difference between Beth's age (57) and Tom's age (34).




```
public class CompareAge{
public static void main(String[] args) {
int ageOfBeth= 57;
int ageOfTom= 34;
System.out.print("The age difference is ");
System.out.print( ageOfBeth- ageOfTom);
}
}
```

Options

The age difference is 23

2. Develop a system to store your name as variable.



The screenshot shows a Java IDE with a window titled 'NameStore'. The code in the editor is as follows:

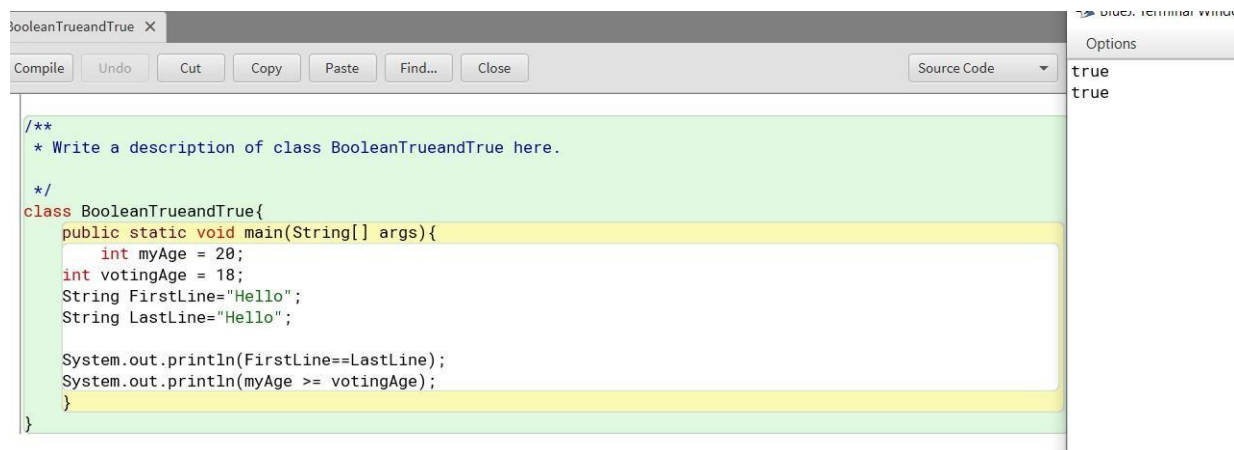
```
import java.util.*;
class NameStore{
    public static void main(String[] args){
        Scanner sc=new Scanner (System.in);
        System.out.print("Enter name:");

        String name=sc.next();
        System.out.println("Your name is "+name);
    }
}
```

To the right of the code editor is a terminal window titled 'Blue: Terminal Window - speherevolume'. It shows the program's execution: 'Enter name:Sabin' followed by 'Your name is Sabin'.

3. Create the above java program in the java environment and then modify the program to use the following statements. Note down the response to each. Do they differ from what you would expect?

❖ boolean result = true && true;



The screenshot shows a Java IDE with a window titled 'BooleanTrueandTrue'. The code in the editor is as follows:

```
/**
 * Write a description of class BooleanTrueandTrue here.
 */
class BooleanTrueandTrue{
    public static void main(String[] args){
        int myAge = 20;
        int votingAge = 18;
        String FirstLine="Hello";
        String LastLine="Hello";

        System.out.println(FirstLine==LastLine);
        System.out.println(myAge >= votingAge);
    }
}
```

To the right of the code editor is a terminal window titled 'Blue: Terminal Window'. It shows the program's execution output: 'true' followed by 'true'.

❖ boolean result = true && false || true;

```
Compile Undo Cut Copy Paste Find... Close Blue: Terminal Window - speherevolume
Options
true
false
true

/**
 * Write a description of class BooleanFalseAndFalseOrTrue here.
 */
class TrueFalseTrue
{
    public static void main(String[] args){
        int a=12;
        int b=20;
        int c=20;
        System.out.println((a<b)&&(b==c));
        System.out.println((b!=c)&&(a==b));
        System.out.println((b==c)|| (a>c));
    }
}
```

❖ boolean result = false && false || true;

```
Compile Undo Cut Copy Paste Find... Close Source Code Blue: Terminal Window - speherevolume
Options
false
false
true

/**
 * Write a description of class BooleanFalseAndFalseOrTrue here.
 */
class BooleanFalseAndFalseOrTrue
{
    public static void main(String[] args){
        int a=12;
        int b=20;
        int c=20;
        System.out.println((a>b)&&(b<a));
        System.out.println((b!=c)&&(a==b));
        System.out.println((b==c)|| (a>c));
    }
}
```

❖ boolean result = false && 0;

```
Compile Undo Cut Copy Paste Find... Close Source Code Options
/**
 * Write a description of class BooleanFalseAndZero here.
 */
class BooleanFalseAndZero
{
    public static void main(String[] args){
        String a="Hello";
        String b="World";
        int n=20;
        int d=20;
        System.out.println(a==b);
        System.out.println(d-n);
    }
}
```

false  
0

❖ boolean result = !(false) && true;

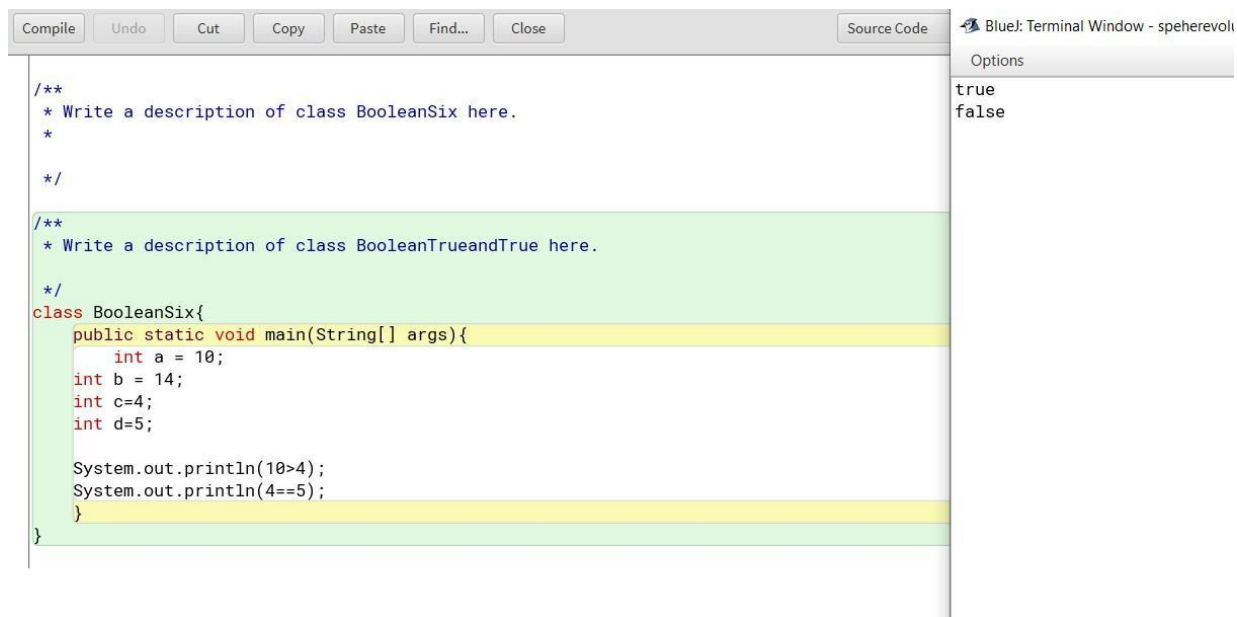
```
Options
/**
 * Write a description of class BooleanNotFalseAndTrue here.
 */
class BooleanNotFalseAndTrue
{
    public static void main(String[] args){
        int a=9;
        int b=7;
        System.out.println(!(b<a));
        System.out.println(!(a==b));
    }
}
```

false  
true

❖ boolean result = !(true && !(false &&

❖ false));

❖ `boolean result = (10 > 14) and (4 == 5);`



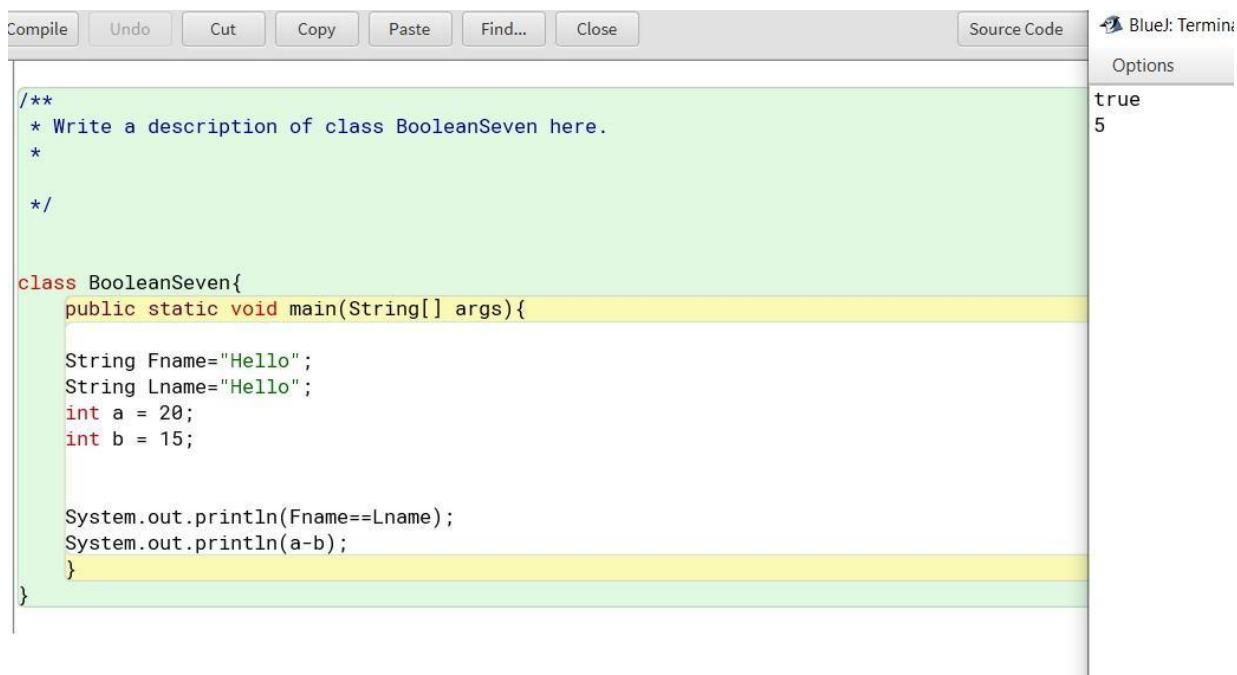
```
Compile Undo Cut Copy Paste Find... Close Source Code BlueJ: Terminal Window - speherevoli
Options
true
false

/**
 * Write a description of class BooleanSix here.
 *
 */

/**
 * Write a description of class BooleanTrueandTrue here.
 *
 */
class BooleanSix{
    public static void main(String[] args){
        int a = 10;
        int b = 14;
        int c=4;
        int d=5;

        System.out.println(10>4);
        System.out.println(4==5);
    }
}
```

❖ `boolean result = true && 5;`



```
Compile Undo Cut Copy Paste Find... Close Source Code BlueJ: Termin
Options
true
5

/**
 * Write a description of class BooleanSeven here.
 *
 */

class BooleanSeven{
    public static void main(String[] args){

        String Fname="Hello";
        String Lname="Hello";
        int a = 20;
        int b = 15;

        System.out.println(Fname==Lname);
        System.out.println(a-b);
    }
}
```

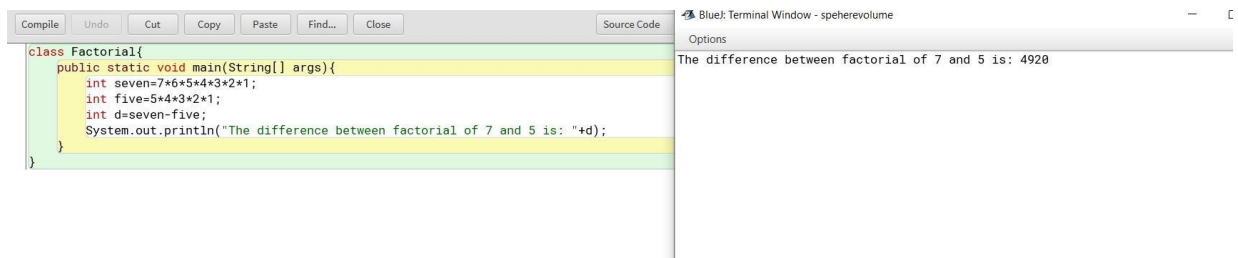
❖ `boolean result = (3 * 4) != (14 - 2) && ('C' >= 'D');`

`boolean result = (12 * 2) == (3 * 8);`

❖ `boolean result = (14 * 2) != (3 * 8);`



4. Find the difference between 7 factorial and 5 factorial.



The screenshot shows a Java IDE window titled "BlueJ: Terminal Window - speherevolume". The left pane displays the source code for a class named `Factorial`. The code defines a `main` method that calculates the factorial of 7 and 5, finds their difference, and prints it. The right pane shows the output of the program: "The difference between factorial of 7 and 5 is: 4920".

```
class Factorial{
    public static void main(String[] args){
        int seven=7*6*5*4*3*2*1;
        int five=5*4*3*2*1;
        int d=seven-five;
        System.out.println("The difference between factorial of 7 and 5 is: "+d);
    }
}
```

The difference between factorial of 7 and 5 is: 4920

5. Complete the following questions by taking user input. ○

Write a Java program that prompts a user for their last name and stores it in a variable named `last_name`.

- Give an instruction that prompts a user for their age and stores it as an integer in a variable named `age`.
- Give an instruction that prompts a user for their temperature and stores it as a float in a variable named `current_temperature`.

The screenshot shows a Java IDE with a file named 'lastname.java'. The code is as follows:

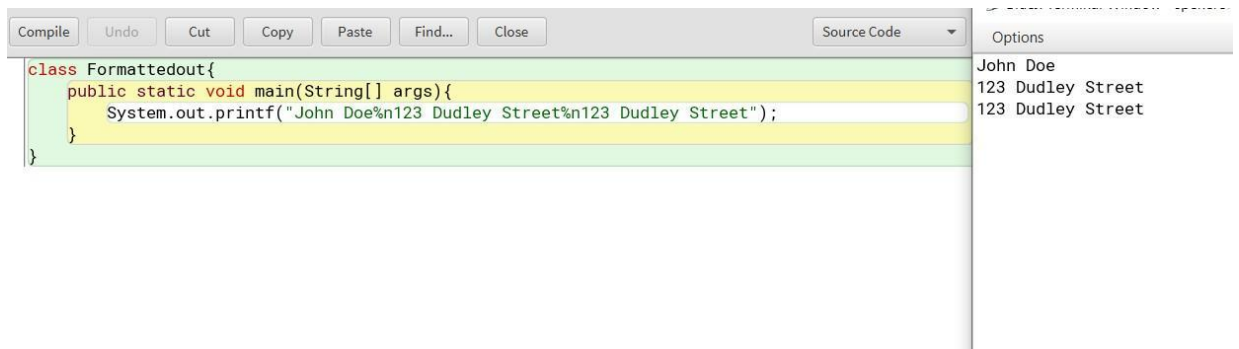
```
import java.util.*;
class Lastname{
    public static void main(String[] args){
        Scanner sc=new Scanner (System.in);

        System.out.print("Enter your last name:");
        String last_name=sc.nextLine();
        System.out.println("The user's last name is: "+last_name);
        System.out.print("Enter your age:");
        int age=sc.nextInt();
        System.out.println("The user's age is: "+age);
        System.out.print("Enter your current body temperture:");
        double current_temperature=sc.nextDouble();
        System.out.println("The user's temperture is: "+current_temperature);
    }
}
```

The terminal window on the right shows the execution of the program with the following input and output:

```
Enter your last name:Bhujel
The user's last name is: Bhujel
Enter your age:22
The user's age is: 22
Enter your current body temperture:97.2
The user's temperture is: 97.2
```

6. Give a call to printf that is provided one string that displays the following address on three separate lines:
- John Doe
  - 123 Dudley Street
  - 123 Dudley Street



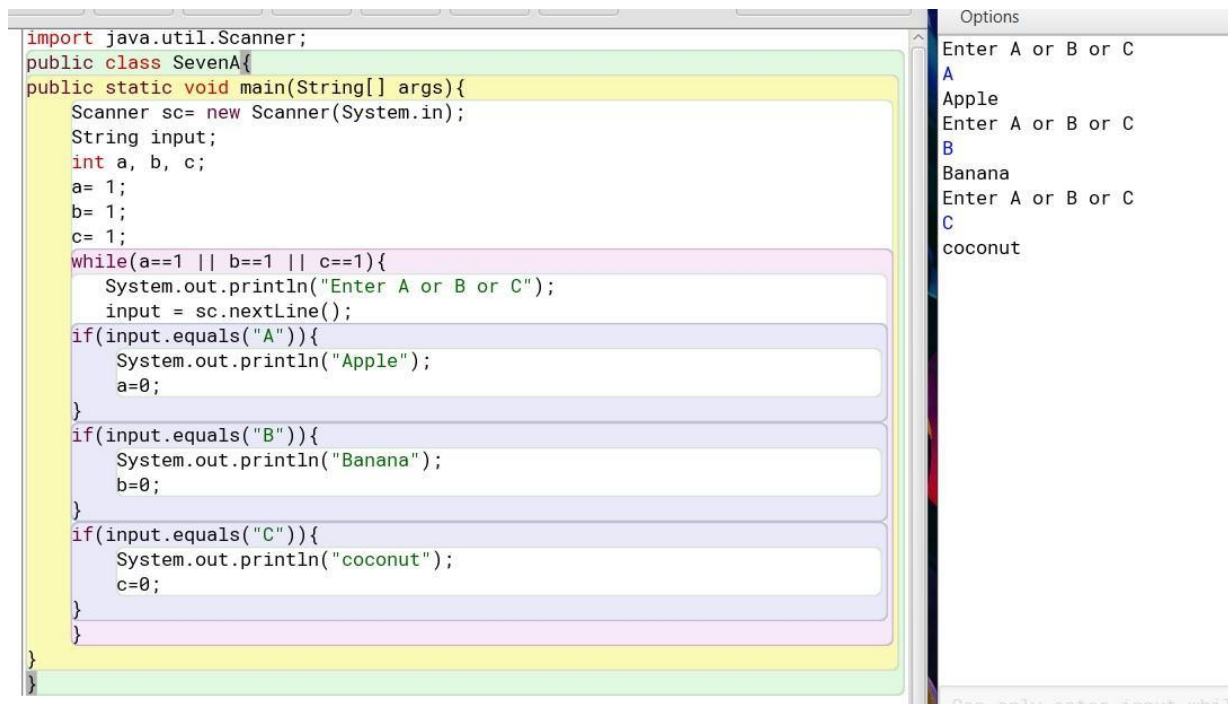
```
class Formattedout{
    public static void main(String[] args){
        System.out.printf("John Doe\n123 Dudley Street\n123 Dudley Street");
    }
}
```

Options

John Doe  
123 Dudley Street  
123 Dudley Street

7. Write a java program in which:

- a) The user enters either 'A', 'B', or 'C'. If 'A' is entered, the program should display the word 'Apple'; if 'B' is entered, it displays 'Banana'; and if 'C' is entered, it displays 'Coconut'. Use nested if statements for this.



```
import java.util.Scanner;
public class SevenA{
    public static void main(String[] args){
        Scanner sc= new Scanner(System.in);
        String input;
        int a, b, c;
        a= 1;
        b= 1;
        c= 1;
        while(a==1 || b==1 || c==1){
            System.out.println("Enter A or B or C");
            input = sc.nextLine();
            if(input.equals("A")){
                System.out.println("Apple");
                a=0;
            }
            if(input.equals("B")){
                System.out.println("Banana");
                b=0;
            }
            if(input.equals("C")){
                System.out.println("coconut");
                c=0;
            }
        }
    }
}
```

Options

Enter A or B or C  
A  
Apple  
Enter A or B or C  
B  
Banana  
Enter A or B or C  
C  
coconut

- b) Repeat question (a) using an (if statement with "else if" pairs) instead.

```

import java.util.Scanner;
public class SevenB{
public static void main(String[] args){
    Scanner sc= new Scanner(System.in);
    String input;
    int a, b, c;
    a= 1;
    b= 1;
    c= 1;
    while(a==1 || b==1 || c==1){
        System.out.println("Enter A or B or C");
        input = sc.nextLine();
        if(input.equals("A")){
            System.out.println("Apple");
            a=0;
        }else if(input.equals("B")){
            System.out.println("Banana");
            b=0;
        }else if(input.equals("C")){
            System.out.println("coconut");
            c=0;
        }else{
            System.out.println("Please Try again");
        }
    }
}
}

```

BlueJ: Terminal Window - speherevolume

Options

Enter A or B or C  
B  
Banana  
Enter A or B or C  
C  
coconut  
Enter A or B or C  
A  
Apple

- c) A student enters the number of college credits earned. If thenumber of credits is greater than or equal to 90, 'Senior Status' is displayed; if greater than or equal to 60, 'Junior Status' is displayed; if greater than or equal to 30, 'Sophomore Status' is displayed; else, 'Freshman Status' is Displayed.

```

import java.util.*;
public class SevenC{
public static void main(String[] args){
    Scanner sc=new Scanner(System.in);
    System.out.println("Enter the number of credits.");
    int creditsEarned=sc.nextInt();
    if(creditsEarned>=90&&creditsEarned<100){
        System.out.println("Your status is Senior Status.");
    }
    if(creditsEarned>=60&&creditsEarned<90){
        System.out.println("Your status is Junior Status.");
    }
    if(creditsEarned>=30&&creditsEarned<60){
        System.out.println("Your status is Sophomore Status.");
    }
    if(creditsEarned<=30&&creditsEarned<0){
        System.out.println("Your status is Freshman Status.");
    }
}
}

```

BlueJ: Terminal Window - speherevolume

Options

Enter the number of credits.  
60  
Your status is Junior Status.

## Group C

1. Create a Java software that will ask the user for a number and then display whether it is positive or negative.

```
import java.util.*;
class PositiveandNegative{
    public static void main(String[] args){
        System.out.println("Enter a Number");
        Scanner sc=new Scanner(System.in);
        int num=sc.nextInt();
        if(num>0)
        {
            System.out.println("The number is positive.");
        }

        else if(num<0)
        {
            System.out.println("The number is negative.");
        }

        else
        {
            System.out.println("The number is zero.");
        }
    }
}
```

Options

Enter a Number  
88  
The number is positive.  
Enter a Number  
-5  
The number is negative.

## 2. Your name left justified 15 spaces. [Formatted Output]

```
public class CTwo{
    public static void main(String[] args){
        String name= "Hello World";
        System.out.printf("%-15s %n",name);
    }
}
```

Options

Hello World

## 3. Your name right justified 15 spaces. [Formatted Output]

```
class CThree{
    public static void main(String[] args){
        String name="Hello World";
        System.out.printf("%15s %n",name);
    }
}
```

BlueJ: Terminal Window - sphere

Options

Hello World

4. There were bunch of students who were curious about their totalmarks, percentage and grade using the marks from five subjects as input. Develop a system to help them find their grades.

```
MarksFromFiveSub X
Compile Undo Cut Copy Paste Find... Close

import java.util.Scanner;
public class MarksFromFiveSub{
    public static void main(String[] args){
        Scanner sc= new Scanner(System.in);
        System.out.println("Enter the marks from five subjects.");
        int Maths=sc.nextInt();
        System.out.println("The marks from Maths is "+Maths+".");
        int English=sc.nextInt();
        System.out.println("The marks from English is "+English+".");
        int Science=sc.nextInt();
        System.out.println("The marks from Science is "+Science+".");
        int History=sc.nextInt();
        System.out.println("The marks from History is "+History+".");
        int HealthEdu=sc.nextInt();
        System.out.println("The marks from HealthEdu is "+HealthEdu+".");
        int totalMarks= Maths+English+Science+History+HealthEdu;
        System.out.println("Your total marks of 5 subjects is= "+ totalMarks);
        double percentage= (totalMarks*5)/100;
        System.out.println("Your percentage is "+ percentage);
        if (percentage<=90){
            System.out.println("Your grade is A+.");
        }
        if (percentage>90 && percentage<=80){
            System.out.println("Your grade is A.");
        }
        if (percentage>80 && percentage<=70){
            System.out.println("Your grade is B+.");
        }
        if (percentage>70 && percentage<=60){
            System.out.println("Your grade is B.");
        }
        if (percentage>60 && percentage<=50){
            System.out.println("Your grade is C+.");
        }
        if (percentage>50 && percentage<=40){
            System.out.println("Your grade is C.");
        }
        if (percentage>40 && percentage<=30){
            System.out.println("Your garde is D+.");
        }
    }
}
```

```
        if (percentage>40 && percentage<=30){
            System.out.println("Your garde is D+.");
        }
        if (percentage>30 && percentage<=20){
            System.out.println("Your grade is D.");
        }
        if (percentage>20 && percentage<0){
            System.out.println("Your grade is E.");
        }
    }
}
```

#### Options

Enter the marks from five subjects.

78

The marks from Maths is 78.

57

The marks from English is 57.

54

The marks from Science is 54.

89

The marks from History is 89.

55

The marks from HealthEdu is 55.

Your total marks of 5 subjects is= 333

Your percentage is 16.0

Your grade is A+.

5. Write a Java program that allows the user to enter two integer values and displays the results with the following arithmetic operators applied to them. For example, if the user enters the values 7 and 5, the output would be:

○ Addition:  $7 + 5 = 12$  ○

Subtraction:  $7 - 5 = 2$  ○

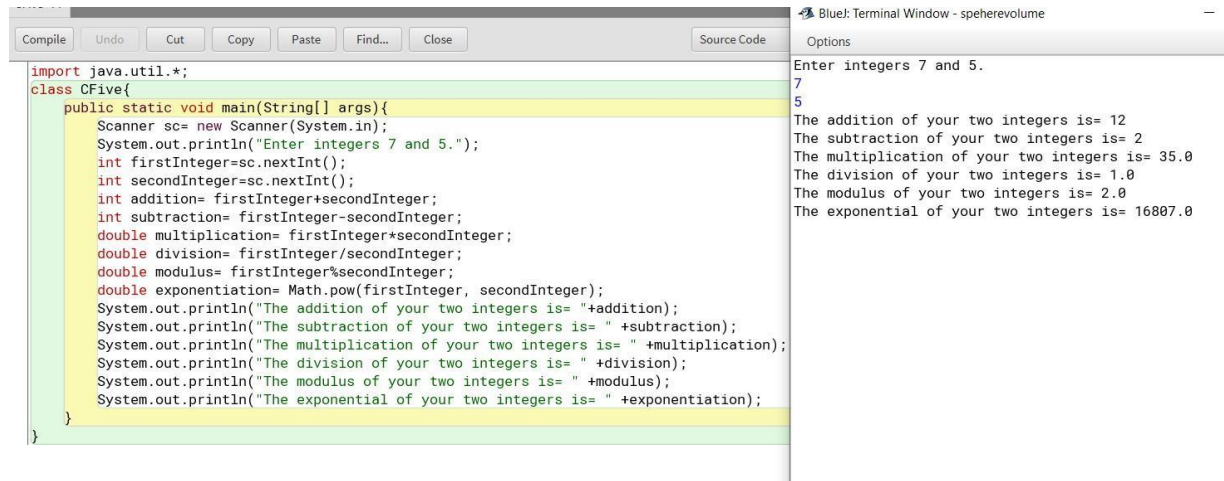
Multiplication:  $7 * 5 = 35$  ○

Division:  $7 / 5 = 1.40$  ○ Modulus:



7 % 5 = 2 ○ Exponentiation: 7 \*\*

5 = 16,807 [All floating-point results should be displayed with two decimal places of accuracy and with commas where appropriate.]



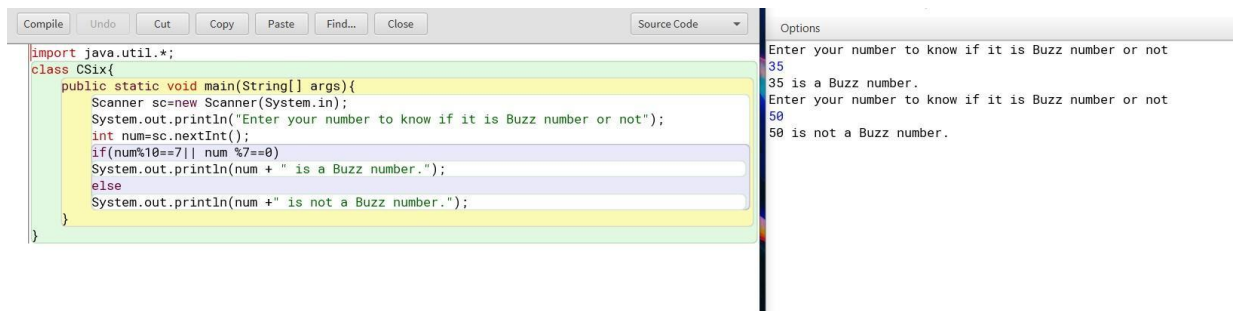
```
import java.util.*;
class CFive{
    public static void main(String[] args){
        Scanner sc= new Scanner(System.in);
        System.out.println("Enter integers 7 and 5.");
        int firstInteger=sc.nextInt();
        int secondInteger=sc.nextInt();
        int addition= firstInteger+secondInteger;
        int subtraction= firstInteger-secondInteger;
        double multiplication= firstInteger*secondInteger;
        double division= firstInteger/secondInteger;
        double modulus= firstInteger%secondInteger;
        double exponentiation= Math.pow(firstInteger, secondInteger);
        System.out.println("The addition of your two integers is= "+addition);
        System.out.println("The subtraction of your two integers is= " +subtraction);
        System.out.println("The multiplication of your two integers is= " +multiplication);
        System.out.println("The division of your two integers is= " +division);
        System.out.println("The modulus of your two integers is= " +modulus);
        System.out.println("The exponential of your two integers is= " +exponentiation);
    }
}
```

BlueJ: Terminal Window - speherevolume

Options

Enter integers 7 and 5.  
7  
5  
The addition of your two integers is= 12  
The subtraction of your two integers is= 2  
The multiplication of your two integers is= 35.0  
The division of your two integers is= 1.0  
The modulus of your two integers is= 2.0  
The exponential of your two integers is= 16807.0

6. Let's create a java program to input a number and check whether it is a Buzz number or not. A number is said to be a buzz number when it ends with 7 or is divisible by 7.



```
import java.util.*;
class CSix{
    public static void main(String[] args){
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter your number to know if it is Buzz number or not");
        int num=sc.nextInt();
        if(num%10==7|| num%7==0)
            System.out.println(num + " is a Buzz number.");
        else
            System.out.println(num + " is not a Buzz number.");
    }
}
```

Options

Enter your number to know if it is Buzz number or not  
35  
35 is a Buzz number.  
Enter your number to know if it is Buzz number or not  
50  
50 is not a Buzz number.

7. Let's take an example program where we will take the age of user as input and find whether he is a child, adult, or senior on the basis of age. Using Java if-else-if ladder statements

```

import java.util.*;
class ChildAdultSenior{
    public static void main(String[] args){
        System.out.println("Enter a age");
        Scanner sc=new Scanner (System.in);
        int age=sc.nextInt();
        if(age<=12){
            System.out.println("The user is a child.");
        }
        else if(age<=13||age<=35){
            System.out.println("The user is an adult.");
        }
        else if(age<=36||age<=75){
            System.out.println("The user is a senior.");
        }
        else{
            System.out.println("The user has great health condition.");
        }
    }
}

```

Options

```

Enter a age
34
The user is an adult.
Enter a age
12
The user is a child.
Enter a age
75
The user is a senior.

```

8. Bruno Mars just appeared his examination and got 75%. He goes to his tutor and asks his grade. Now being a tutor you need to develop a program which tells his grade.

```

class BrunoMars{
    public static void main(String[] args){
        double percentage=75;
        if (percentage<=90){
            System.out.println("Your grade is A+.");
        }
        if (percentage<90 && percentage>=80){
            System.out.println("Your grade is A.");
        }
        if (percentage<80 && percentage>=70){
            System.out.println("Your grade is B+.");
        }
        if (percentage<70 && percentage>=60){
            System.out.println("Your grade is B.");
        }
        if (percentage<60 && percentage>=50){
            System.out.println("Your grade is C+.");
        }
        if (percentage<50 && percentage>=40){
            System.out.println("Your grade is C.");
        }
        if (percentage<40 && percentage>=30){
            System.out.println("Your grade is D+.");
        }
        if (percentage<30 && percentage>=20){
            System.out.println("Your grade is D.");
        }
        if (percentage<20 && percentage>=0){
            System.out.println("Your grade is E.");
        }
    }
}

```

Your grade is B+.

Can only enter input with

9. If a customer wants to take a t-shirt from your shop and he wants to buy a t-shirt and feeds in his/her size. Then print the availability as per their preference. [Using Switch Case Statement].

```
Compile Undo Cut Copy Paste Find... Close Source Code
import java.util.*;
class Tshirt{
    public static void main(String[] args){
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter your size where 1 is small,2 is medium,3 is large, 4 is XL,5 is XXL and enter 6 for more");
        int size= sc.nextInt();
        switch(size){
            case 1:
                System.out.println("The small size is not available.");
                break;
            case 2:
                System.out.println("The medium has only 3 colors of tshirt.");
                break;
            case 3:
                System.out.println("Large size is available.");
                break;
            case 4:
                System.out.println("XL is available.");
                break;
            case 5:
                System.out.println(" We dont have any of your size:");
                break;
            default:
                System.out.println("Out of Stock");
        }
    }
}
```

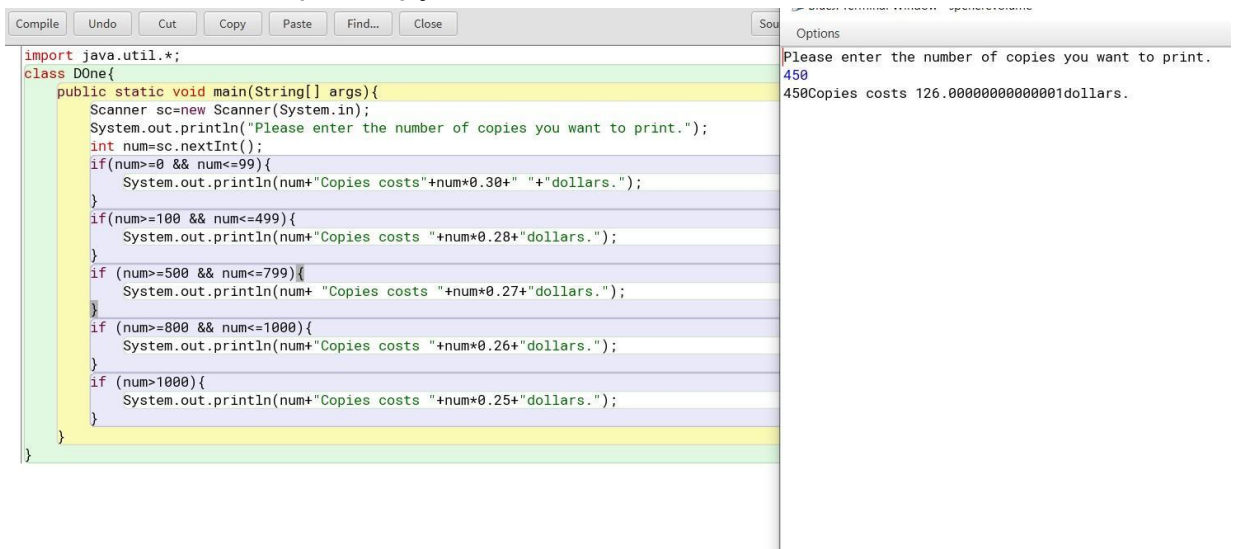
```
Options
Enter your size where 1 is small,2 is medium,3 is large, 4 is XL,5 is XXL and enter 6 for more
3
Large size is available.
Enter your size where 1 is small,2 is medium,3 is large, 4 is XL,5 is XXL and enter 6 for more
2
The medium has only 3 colors of tshirt.
Enter your size where 1 is small,2 is medium,3 is large, 4 is XL,5 is XXL and enter 6 for more
1
The small size is not available.
Enter your size where 1 is small,2 is medium,3 is large, 4 is XL,5 is XXL and enter 6 for more
6
Out of Stock
```

## Group D

1. Let's create a printing application program where we will take the number of copies to be printed as input from the user and then prints the price per copy and the total price for the printing copies.

The chart price to print the number of copies is given below:

- . 0 – 99 : \$0.30 per copy
- . 100 – 499 : \$0.28 per copy
- . 500 – 799 : \$0.27 per copy
- . 800 – 1000 : \$0.26 per copy
- . over 1000 : \$0.25 per copy

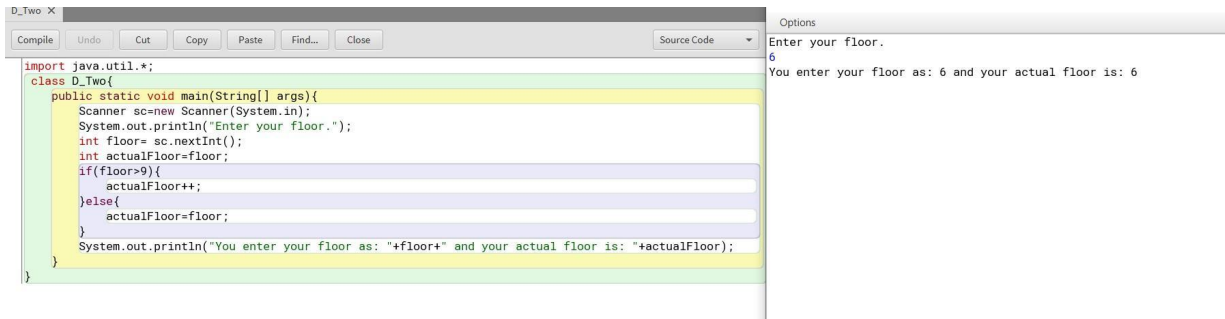


```
import java.util.*;
class DOne{
    public static void main(String[] args){
        Scanner sc=new Scanner(System.in);
        System.out.println("Please enter the number of copies you want to print.");
        int num=sc.nextInt();
        if(num>=0 && num<=99){
            System.out.println(num+"Copies costs "+num*0.30+" "+"dollars.");
        }
        if(num>=100 && num<=499){
            System.out.println(num+"Copies costs "+num*0.28+"dollars.");
        }
        if (num>=500 && num<=799){
            System.out.println(num+"Copies costs "+num*0.27+"dollars.");
        }
        if (num>=800 && num<=1000){
            System.out.println(num+"Copies costs "+num*0.26+"dollars.");
        }
        if (num>1000){
            System.out.println(num+"Copies costs "+num*0.25+"dollars.");
        }
    }
}
```

Options

Please enter the number of copies you want to print.  
450  
450Copies costs 126.00000000000001dollars.

2. Follow the simulation of Floor example from lecture slide and develop a system where you need to ask user the floor number. Also determine whether the floor is actual floor or not.



The screenshot shows a Java IDE with a file named 'D\_Two.java'. The code is as follows:

```
import java.util.*;
class D_Two{
    public static void main(String[] args){
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter your floor.");
        int floor= sc.nextInt();
        int actualFloor=floor;
        if(floor>9){
            actualFloor++;
        }else{
            actualFloor=floor;
        }
        System.out.println("You enter your floor as: "+floor+" and your actual floor is: "+actualFloor);
    }
}
```

The 'Options' window on the right shows the input and output:

```
Enter your floor.
6
You enter your floor as: 6 and your actual floor is: 6
```

3. [Scenario] You're waiting at a station and the announcer has just broadcast that your train is going to be **13445** seconds late. You need to work out in understandable terms what that means. You assume this is going to be quite a long time so you whip out your laptop to write a program to convert the seconds into hours, minutes and seconds, aiming to maximize readability by giving priority to the largest units, i.e. the resulting seconds and minute's values must not be greater than 60.

You will need four variables to hold: the total number of seconds; the number of hours; the number of minutes; and the number of remaining seconds. The example output should look something like this:

*13442 Seconds is: 3 Hours, 44 Minutes and 5 Seconds.*



The screenshot shows a Java IDE with a file named 'GDThree.java'. The code is as follows:

```
/**
 * Write a description of class GroupDThree here.
 *
 * @author (your name)
 * @version (a version number or a date)
 */
class GDThree{
    public static void main(String[] args){
        int sec=13445;
        int hrs=sec/3600;
        int rem=sec%3600;
        int min=rem/60;
        int second=rem%60;
        System.out.println("13445 seconds is: " + hrs+ " hours, "+min+" minutes and "+second+" Seconds.");
    }
}
```

The 'Options' window on the right shows the output:

```
13445 seconds is: 3 hours, 44 minutes and 5 Seconds.
```