

Philip Pesic

Week 5

February 19 2023

Week 5 Prog 3

Program 3 - Write a "Temperature Conversion" program.

Declare choice, tempIn, tempOut variables

Prompt the user with the messages to choose: 1) Centigrade to Fahrenheit, 2) Fahrenheit to centigrade.

Prompt the user for temperature value (tempIn) to convert.

Calculate new tempOut. The calculation of the new tempOUT depends on choice 1 or 2 above.\

(Lookup up the C to F formula online, look up the F to C formula online)

Print out the the F and the C temps.

Be sure to use the C and F temperature degree circle notation ASCII symbol. (look up online)

```
package prog3;
import java.util.Scanner;

class prog3 {
    public static void main(String[] args) {
        Scanner input = new Scanner(System.in);

        char tempType;
        int temp;
        int tempOut;

        System.out.println("Enter the type of temperature (C/F): ");
        tempType = input.next().charAt(0);

        System.out.println("Enter temperature: ");
        temp = input.nextInt();
```

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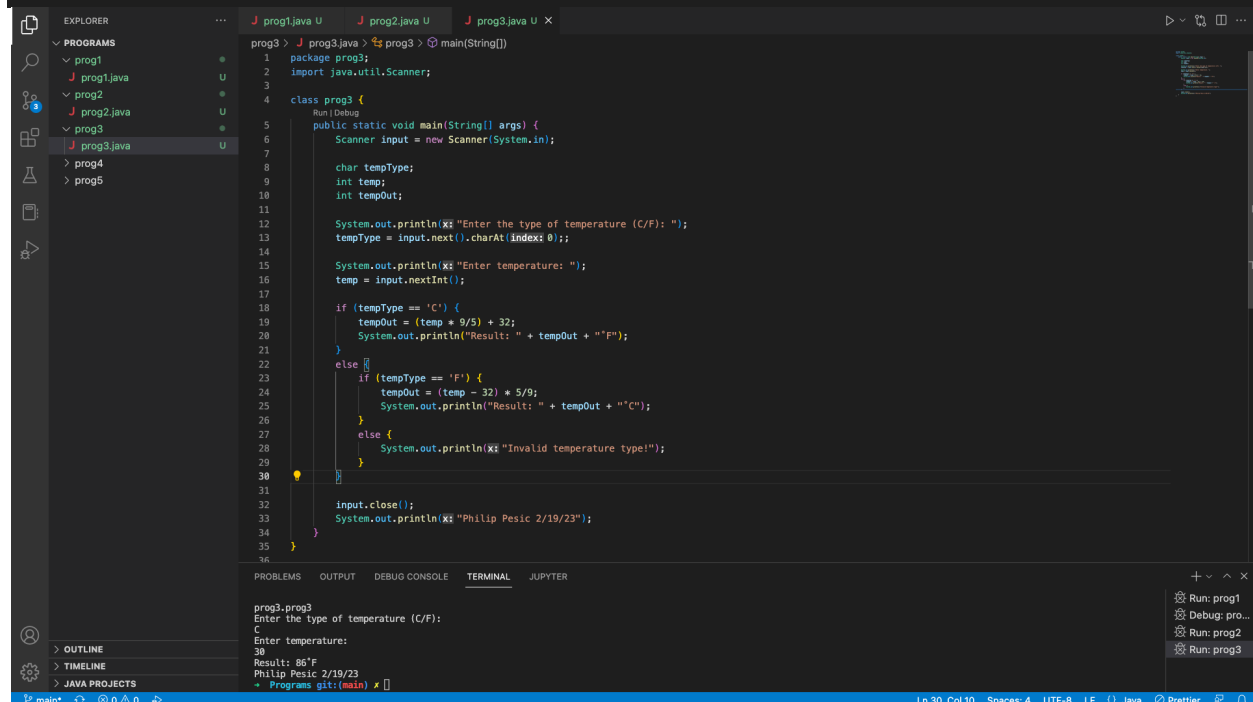
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```
        if (tempType == 'C') {
            tempOut = (temp * 9/5) + 32;
            System.out.println("Result: " + tempOut + "°F");
        }
        else {
            if (tempType == 'F') {
                tempOut = (temp - 32) * 5/9;
                System.out.println("Result: " + tempOut + "°C");
            }
            else {
                System.out.println("Invalid temperature type!");
            }
        }
    }

    input.close();
    System.out.println("Philip Pesic 2/19/23");
}
}
```



The screenshot shows an IDE with the following components:

- EXPLORER:** A tree view on the left showing a project structure with folders 'prog1', 'prog2', 'prog3', 'prog4', and 'prog5'. The 'prog3' folder is expanded, showing 'prog3.java'.
- Run and Debug Console:** On the right, it shows the execution of 'prog3' with the command 'main(String[])'. The console output shows the program's execution flow, including the calculation of the temperature conversion.
- Terminal:** At the bottom, it shows the output of the program, including the prompt 'Enter the type of temperature (C/F):', the user input 'C', the prompt 'Enter temperature:', the user input '86', and the final output 'Result: 86°F' and 'Philip Pesic 2/19/23'.

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I learned: how to use if/else statements to write a default case