

## TASK 1:

```
package ElliteTech;
import java.util.Scanner;
public class Task1 {

    // Conversion methods
    public static double celsiusToFahrenheit(double celsius) {
        return (celsius * 9/5) + 32;
    }

    public static double celsiusToKelvin(double celsius) {
        return celsius + 273.15;
    }

    public static double fahrenheitToCelsius(double fahrenheit) {
        return (fahrenheit - 32) * 5/9;
    }

    public static double fahrenheitToKelvin(double fahrenheit) {
        return (fahrenheit - 32) * 5/9 + 273.15;
    }

    public static double kelvinToCelsius(double kelvin) {
        return kelvin - 273.15;
    }

    public static double kelvinToFahrenheit(double kelvin) {
        return (kelvin - 273.15) * 9/5 + 32;
    }

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

        System.out.println("Welcome to the Temperature Converter!");

        // Get temperature value and unit from the user
        System.out.print("Enter the temperature value: ");
        double tempValue = scanner.nextDouble();

        System.out.println("Choose the original unit of the temperature:");
        System.out.println("1. Celsius (C)");
        System.out.println("2. Fahrenheit (F)");
        System.out.println("3. Kelvin (K)");

        System.out.print("Enter your choice (1/2/3): ");
        int unitChoice = scanner.nextInt();

        switch (unitChoice) {
            case 1: // Celsius
                double fahrenheit = celsiusToFahrenheit(tempValue);
                double kelvin = celsiusToKelvin(tempValue);
                System.out.printf("%.2f °C is equal to %.2f °F and %.2f K.%n",
tempValue, fahrenheit, kelvin);
                break;

            case 2: // Fahrenheit
                double celsiusFromF = fahrenheitToCelsius(tempValue);
```

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        double kelvinFromF = fahrenheitToKelvin(tempValue);
        System.out.printf("%.2f °F is equal to %.2f °C and %.2f K.%n",
tempValue, celsiusFromF, kelvinFromF);
        break;

    case 3: // Kelvin
        double celsiusFromK = kelvinToCelsius(tempValue);
        double fahrenheitFromK = kelvinToFahrenheit(tempValue);
        System.out.printf("%.2f K is equal to %.2f °C and %.2f °F.%n",
tempValue, celsiusFromK, fahrenheitFromK);
        break;

    default:
        System.out.println("Invalid choice. Please run the program again
and choose a valid option.");
    }

    scanner.close();
}
}

```

#### OUTPUT:

```

Welcome to the Temperature Converter!
Enter the temperature value: 1
Choose the original unit of the temperature:
1. Celsius (C)
2. Fahrenheit (F)
3. Kelvin (K)
Enter your choice (1/2/3): 1
1.00 °C is equal to 33.80 °F and 274.15 K.

```