1.Task 1

Create a program that converts temperatures between Celsius, Fahrenheit, and Kelvin scales.

```java
import java.util.Scanner;

public class TemperatureConverter {

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

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

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

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

```java
public static double kelvinToCelsius(double k) {
    return k - 273.15;
}

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

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

    System.out.println("Temperature Converter");
    System.out.println("1. Celsius to Fahrenheit and Kelvin");
    System.out.println("2. Fahrenheit to Celsius and Kelvin");
    System.out.println("3. Kelvin to Celsius and Fahrenheit");
    System.out.print("Enter your choice (1/2/3): ");

    int choice = scanner.nextInt();
```

```java
switch (choice) {
    case 1:
        System.out.print("Enter temperature in Celsius: ");
        double celsius = scanner.nextDouble();
        System.out.println("Fahrenheit: " +
        celsiusToFahrenheit(celsius));
        System.out.println("Kelvin: " +
        celsiusToKelvin(celsius));
        break;

    case 2:
        System.out.print("Enter temperature in
        Fahrenheit: ");
        double fahrenheit = scanner.nextDouble();
        System.out.println("Celsius: " +
        fahrenheitToCelsius(fahrenheit));
        System.out.println("Kelvin: " +
        fahrenheitToKelvin(fahrenheit));
        break;

    case 3:
```

```java
                System.out.print("Enter temperature in Kelvin: ");
                double kelvin = scanner.nextDouble();
                System.out.println("Celsius: " +
                kelvinToCelsius(kelvin));
                System.out.println("Fahrenheit: " +
                kelvinToFahrenheit(kelvin));
                break;

            default:
                System.out.println("Invalid choice!");
        }

        scanner.close();
    }
}
```