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Question 01: Build a program in Java that converts temperatures between Celsius and Fahrenheit.

Answer: This program takes a temperature in Celsius as input and converts it to Fahrenheit, and vice versa. It uses the conversion formulas:

Celsius to Fahrenheit: $F = (C \times 9/5) + 32$

Fahrenheit to Celsius: $C = (F - 32) \times 5/9$

Compile and run this program to use it for temperature conversions

Program

```
Import java.util.Scanner;
```

```
Public class TemperatureConverter {
```

```
    Public static void main(String[] args) {
```

```
        Scanner input = new Scanner(System.in);
```

```
        System.out.print("Enter temperature in Celsius: ");
```

```
        Double celsius = input.nextDouble();
```

```
        // Convert Celsius to Fahrenheit
```

```
        Double fahrenheit = (celsius * 9/5) + 32;
```

```
        System.out.println("Temperature in Fahrenheit: " + fahrenheit);
```

```
        System.out.print("Enter temperature in Fahrenheit: ");
```

```
        Double fahrenheitInput = input.nextDouble();
```

```
        // Convert Fahrenheit to Celsius
```

```
        Double celsiusConverted = (fahrenheitInput - 32) * 5/9;
```

```
System.out.println("Temperature in Celsius: " + celsiusConverted);
```

```
Input.close();
```

```
}
```

```
}
```