

```
def celsius_to_fahrenheit(celsius):  
    return (celsius * 9/5) + 32
```

```
def fahrenheit_to_celsius(fahrenheit):  
    return (fahrenheit - 32) * 5/9
```

```
def temperature_converter():  
    print("Welcome to the Temperature  
Converter!")
```

```
    try:  
        value = float(input("Enter the temperature  
value: "))  
    except ValueError:  
        print("Invalid input. Please enter a numeric  
value.")  
    return
```

```
    source_unit = input("Enter the source unit (C  
for Celsius, F for Fahrenheit): ").upper()  
    target_unit = input("Enter the target unit (C  
for Celsius, F for Fahrenheit): ").upper()
```

```
if source_unit == target_unit:
    print("Source and target units are the same.
No conversion needed.")
    return
```

```
if source_unit == 'C' and target_unit == 'F':
    result = celsius_to_fahrenheit(value)
    print(f"{value} Celsius is equal to {result:.2f}
Fahrenheit.")
```

```
elif source_unit == 'F' and target_unit == 'C':
    result = fahrenheit_to_celsius(value)
    print(f"{value} Fahrenheit is equal to
{result:.2f} Celsius.")
```

```
else:
    print("Unsupported units. Please choose
either Celsius (C) or Fahrenheit (F).")
```

```
# Run the temperature converter
temperature_converter()
```