temperature = float(input("Enter the temperature value: "))

unit = input("Enter the unit of measurement (C for Celsius, F for Fahrenheit): ")

if unit.upper() == "C":

    converted\_temperature = (temperature \* 9/5) + 32

    print(f"{temperature}°C is equal to {converted\_temperature}°F")

elif unit.upper() == "F":

    converted\_temperature = (temperature - 32) \* 5/9

    print(f"{temperature}°F is equal to {converted\_temperature}°C")

else:

    print("Invalid unit of measurement.")

This code prompts the user to enter a temperature value and the corresponding unit of measurement (either Celsius or Fahrenheit). It then performs the conversion to the other unit and displays the converted temperature.

Here's the breakdown of the code:

1. The **temperature** variable stores the user's input for the temperature value. It is converted to a floating-point number using **float()** to handle decimal values.
2. The **unit** variable stores the user's input for the unit of measurement (either "C" for Celsius or "F" for Fahrenheit).
3. The code checks if the unit of measurement is Celsius by using **unit.upper() == "C"**. The **upper()** method is used to convert the user's input to uppercase, allowing for case-insensitive comparisons.
4. If the unit is Celsius, the code calculates the equivalent temperature in Fahrenheit using the conversion formula **(temperature \* 9/5) + 32** and stores it in the **converted\_temperature** variable. It then prints the original temperature and the converted temperature using an f-string.
5. If the unit is Fahrenheit, the code follows a similar process to convert the temperature to Celsius using the conversion formula **(temperature - 32) \* 5/9**. The converted temperature is stored in the **converted\_temperature** variable and printed.
6. If the unit of measurement is neither Celsius nor Fahrenheit, the code prints an error message stating that the unit of measurement is invalid.