

Experiment 8: Write a program to convert temperature to and from Celsius to Fahrenheit.

CODE:

```
def celsius_to_fahrenheit(celsius):
    #Convert temperature from Celsius to Fahrenheit.
    return (celsius *9/5) + 32

def fahrenheit_to_celsius(fahrenheit):
    #Convert temperature from Fahrenheit to Celsius.
    return (fahrenheit - 32) *5/9

#Main function to take user input and perform conversions
def main():
    print("Temperature Conversion Program")
    print("1. Celsius to Fahrenheit")
    print("2. Fahrenheit to Celsius")
    choice = int(input("Enter choice: "))
    if choice== 1:
        celsius = float(input("Enter temperature in Celsius : "))
        fahrenheit = celsius_to_fahrenheit(celsius)
        print(f'{celsius} Celsius is equal to {fahrenheit}
Fahrenheit")
    elif choice == 2:
        fahrenheit = float(input("Enter temperature in Fahrenheit :
"))
        celsius = fahrenheit_to_celsius(fahrenheit)
        print(f'{fahrenheit} Fahrenheit is equal to {celsius}
Celsius")
```

else:

print("Invalid choice. Please enter 1 or 2.")

if __name__ == "__main__":

main()

OUTPUT:

```
Temperature Conversion Program
1. Clesius to Fahrenheit
2. Fahrenheit to Clesius
Enter choice: 1
Enter temperature in Clesius : 32
32.0 Celsius is equal to 89.6 Fahrenheit
PS D:\PROGRAMMING\Python Practice\Python_sam
```

```
Temperature Conversion Program
1. Clesius to Fahrenheit
2. Fahrenheit to Clesius
Enter choice: 2
Enter temperature in Fahrenheit : 89.6
```