

- Write a Python program to convert temperatures to and from celsius, fahrenheit.

$$celsius = \frac{5}{9}(fahrenheit - 32)$$

$$fahrenheit = \frac{9}{5}celsius + 32$$

- Hint: This outline is an almost-complete solution. You only have to replace each ellipsis by an expression.

```
In [3]: temperature = input("Enter the temperature you want to convert: (e.g. 45C, 103F,...) ")
unit = temperature[-1]
degree = int(temperature[:-1])

if ... :
    result = int(round((9 * degree) / 5 + 32))
    out_unit = "Fahrenheit"
elif ... :
    result = int(round((degree - 32) * 5 / 9))
    out_unit = "Celsius"
else:
    print("Input proper convention.")
    quit()
print(f"The temperature {temperature} in {out_unit} is {result}{out_unit[0]}.")
```

The temperature 100F in Celsius is 38C.

```
In [ ]: Enter the temperature you want to convert: (e.g. 45C, 103F,...) 32C
Expected output:
    The temperature 32C in Fahrenheit is 90F.

Enter the temperature you want to convert: (e.g. 45C, 103F,...) 100F
Expected output:
    The temperature 100F in Celsius is 38C.
```

