

ASSIGNMENT-1

Q\n: Temperature Converter Write a Python function named `convert_temperature` that converts temperatures between Fahrenheit and Celsius. The function should take two arguments: the temperature to convert and the unit of the input temperature ('F' for Fahrenheit, 'C' for Celsius). The function should return the converted temperature.

Requirements: If the input unit is 'F', convert the temperature to Celsius. If the input unit is 'C', convert the temperature to Fahrenheit. Round the result to 2 decimal places.

Formulae: -Celsius to Fahrenheit: $(C * 9/5) + 32$

-Fahrenheit to Celsius: $(F - 32) * 5/9$

Hints: -Use conditional statements to handle the conversion based on the unit.

-Use the `round()` function to round off the result

```
Sol : def convert_temperature(temp, unit):
    """
    Converts temperature between Fahrenheit and Celsius.

    Parameters:
    temp (float): The temperature value to convert.
    unit (str): The unit of the input temperature ('F' or 'C').

    Returns:
    float: The converted temperature, rounded to 2 decimal places.
    """
    if unit == 'F':
        # Convert Fahrenheit to Celsius
        converted = (temp - 32) * 5 / 9
    elif unit == 'C':
        # Convert Celsius to Fahrenheit
        converted = (temp * 9 / 5) + 32
    else:
        raise ValueError("Unit must be 'F' or 'C'")
    return round(converted, 2)
print(convert_temperature(100, 'F')) # Output: 37.78
print(convert_temperature(0, 'C'))  # Output: 32.0
```