Function

May 8, 2023

[3]:
```
fahrenheit_val = 99
celsius_val = ((fahrenheit_val - 32)*(5/9))

print(celsius_val)
```

```
37.22222222222222
```

[5]:
```
fahrenheit_val2 = 43
celsius_val2 = ((fahrenheit_val2 - 32)*(5/9))

print(celsius_val2)
```

```
6.111111111111112
```

[6]:
```
def explicit_fahr_to_celsius(temp):
    # Assign the converted value to a variable
    converted = ((temp - 32)* (5/9))
    # Return the values of the new variable
    return converted
```

[7]:
```
def fahr_to_celsius(temp):
    # Return converted values more effeciently using the return function␣
 ↪without creating a new variable. This code does the same thing as the␣
 ↪previous funtion but it is more explicit in explianing how the return␣
 ↪command works
    return ((temp-32)*(5/9))
```

[8]:
```
fahr_to_celsius(32)
```

[8]:
```
0.0
```

[9]:
```
explicit_fahr_to_celsius(32)
```

[9]:
```
0.0
```

[10]:
```
print('Freezing point of water:', fahr_to_celsius(32), 'C')
print('Boiling point of water:', fahr_to_celsius(212), 'C')
```

```
Freezing point of water: 0.0 C
Boiling point of water: 100.0 C
```

[11]:
```
def celsius_to_kelvin(temp_c):
    return temp_c + 273.15

print('freezing point of water in Kelvin', celsius_to_kelvin(0.))
```

```
freezing point of water in Kelvin 273.15
```

[12]:
```
def fahr_to_kelvin(temp_f):
    temp_c = fahr_to_celsius(temp_f)
    temp_k = celsius_to_kelvin(temp_c)
    return temp_k

print('boiling point of water in Kelvin:', fahr_to_kelvin(212.0))
```

```
boiling point of water in Kelvin: 373.15
```

[13]:
```
print('Again, temperature in Kelvin was:', temp_k)
```

```
␣
↪---------------------------------------------------------------------------

NameError                                 Traceback (most recent call␣
↪last)

<ipython-input-13-eed2471d229b> in <module>
----> 1 print('Again, temperature in Kelvin was:', temp_k)


NameError: name 'temp_k' is not defined
```

[14]:
```
temp_kelvin = fahr_to_kelvin(212.0)
print('Temperature in Kelvin was:', temp_kelvin)
```

```
Temperature in Kelvin was: 373.15
```

[15]:
```
temp_kelvin
```

[15]:
```
373.15
```

[17]:
```
def print_temperatures():
    print('Temperature in Fahrenheit was:', temp_fahr)
    print('Temperature in Kelvin was:', temp_kelvin)
```

```
temp_fahr = 212.0
temp_kelvin = fahr_to_kelvin(temp_fahr)

print_temperatures()
```

```
Temperature in Fahrenheit was: 212.0
Temperature in Kelvin was: 373.15
```

[ ]: