Worksheet 10 - functions

Monday, October 7, 2024

DS 002R - Jo Hardin

Your Name: _____

Names of people you worked with: _____

Have your academic interests changed since you entered college? In what way?

Task:

Write a function for converting temperatures that takes as input a numeric value and a unit (either "C" for Celsius or "F" for Fahrenheit). The function should convert the temperature from one unit to the other based on the following formulas:

- To convert Celsius to Fahrenheit: `(Celsius * 9/5) + 32`
- To convert Fahrenheit to Celsius: `(Fahrenheit - 32) * 5/9`

Solution:

```
temp_conv <- function(x, orig_unit){
  if(orig_unit == "Fahrenheit"){
    (x - 32) * 5/9
  } else if (orig_unit == "Celsius"){
    (x * 9/5) + 32
  }
}

temp_conv(x = 32, orig_unit = "Fahrenheit")
```

```
[1] 0
```

```
temp_conv(x = 0, orig_unit = "Celsius")
```

```
[1] 32
```

```
temp_conv(x = 212, orig_unit = "Fahrenheit")
```

```
[1] 100
```

```
temp_conv(x = 100, orig_unit = "Celsius")
```

```
[1] 212
```