

Lab 4

(50 Points)

Using loops to display temperature conversion tables

1. Using a **while loop**: use a while loop to display a table of the Celsius temperatures 0 through 20 and their converted Fahrenheit equivalents.
2. Using a **for loop**: use a for loop to display a table of the Celsius temperatures 0 through 20 and their converted Fahrenheit equivalents.

The formula for converting a temperature from Celsius to Fahrenheit is below.

$$(9/5) * \text{Celsius temp} + 32$$

Notes:

- Both loops should produce exactly the same output with two identical tables displayed one after the other (see the examples below).
- Fahrenheit temperatures must be formatted to two decimal places (see the example below)

```
Temperature conversions using a while loop

Cels    Fahr
0        32.00
1        33.80
2        35.60
3        37.40
4        39.20
5        41.00
6        42.80
7        44.60
8        46.40
9        48.20
10       50.00
11       51.80
12       53.60
13       55.40
14       57.20
15       59.00
16       60.80
17       62.60
18       64.40
19       66.20
20       68.00
```

Temperature conversions using a for loop

Cels	Fahr
0	32.00
1	33.80
2	35.60
3	37.40
4	39.20
5	41.00
6	42.80
7	44.60
8	46.40
9	48.20
10	50.00
11	51.80
12	53.60
13	55.40
14	57.20
15	59.00
16	60.80
17	62.60
18	64.40
19	66.20
20	68.00

Rubric: The rubric is located on the assignment page in Canvas. Please review the rubric to make sure you meet all of the requirements for this lab.