



CST-105: Programming Exercise 2

1. Write a program that asks the user to enter a 5-digit positive integer. Using only the / and % operations, compute each digit and display the sum of the digits. Here is a sample run with the user input shown in red.

```
Enter a 5-digit positive integer: 30458
The sum of the digits is 3 + 0 + 4 + 5 + 8 = 20
```

2. Write a program that asks the user to enter a temperature in degrees Fahrenheit. Convert the temperature to degrees Celsius. Then ask the user to enter a temperature in Celsius. Convert the temperature to degrees Fahrenheit. The formulas needed are $C = (F - 32) * 5/9$ and $F = 9/5 * C + 32$. Here is a sample run of the program with user input shown in red.

```
Enter a Fahrenheit temperature: 100
100F is equivalent to 37.777...C
Enter a Celsius temperature: 100
100C is equivalent to 212F
```

3. Be sure to test your results carefully. Use a handheld calculator to see if your program produces the same output. Refer to the rubric in Loud Cloud prior to beginning this assignment to become familiar with the expectations for successful completion.