

CST8110_531 – Lab 2

Due date: January 27, 2020

What to submit: Lab2.java (no need to submit a zipped folder)

Challenge

Write a program that asks the user to

- ❖ Enter a number consisting of 3 digits (ex. 345 or -123)
- ❖ If the number is a negative one, the program should make it positive and display its positive value
- ❖ Then the program needs to compute the sum of digits in this number. For example, if the user enters 345, the sum of digits would be 12. In order to compute this, you need to division and modulus operators. Remember that $123/100$ is 1 and $123\%100$ is 23.
- ❖ After that, the program would need to check if the sum of digits is divisible by 3 and displays a message appropriately
- ❖ Now the program needs to prompt the user for a new number to multiply the original number by and displays the results, as per output below

Here are some sample outputs:

Output 1

Enter a number consisting of 3 digits (ex. 345 or -113)

-555

The positive value of the number entered is 555

Sum of digits is 15

The sum of digits is divisible by 3

Enter a number to multiply the original number by

2

Multiplying $555 \times 2 = 1110$

Output 2

Enter a number consisting of 3 digits(ex. 345 or -113)

123

Sum of digits is 6

The sum of digits is divisible by 3

Enter a number to multiply the original number by

3

Multiplying $123 \times 3 = 369$

Output 3

Enter a number consisting of 3 digits(ex. 345 or -113)

356

Sum of digits is 14

The sum of digits is not divisible by 3

Enter a number to multiply the original number by

5

Multiplying $356 \times 5 = 1780$