Problem 11: Sum of Digits Until Single Digit

Objective: The goal of this problem is to write a Python function that repeatedly sums the digits of a

given integer until the result is a single digit. You will also write a script to read the input from the

console and print the output.

Background: Reducing a number to a single digit involves repeatedly summing its digits until only

one digit remains.

Task: Write a Python function that takes one parameter num (int) and returns the single-digit sum of

its digits. Write a script to read the input from the console and print the output.

Input Format:

- num (int): The integer to be reduced to a single digit.

Output Format:

- The single-digit sum of the digits of the given integer.

Sample Input:

12345

Sample Output:

6