1. Create a program to calculate the sum of digits of a given number using a **do-while** loop. Break the loop if the sum is a single digit.

public class SumOfDigitsDWL {

public static void main(String[] args) {

int number = 12345; // The given number

int sum = 0;

// Loop to calculate the sum of digits

do {

// Extract the last digit and add it to the sum

sum += number % 10;

// Remove the last digit from the number

number /= 10;

} while (number > 0 && sum > 9); // Continue loop if number has digits left and sum is not a single digit

System.out.println("Sum of digits: " + sum);

}

}