DivAndMod:

Input	Processing	Output
Two integers (`num1`, `num2`)	- Perform integer division `num1 / num2` and modulus `num1 % num2` (if `num2 != 0`)	Results of `num1 / num2` and `num1 % num2`
	- Perform integer division `num2 / num1` and modulus `num2 % num1` (if `num1 != 0`)	Results of `num2 / num1` and `num2 % num1`
	- Handle divide-by-zero cases	Error message if division by zero attempted

Digits:

Input	Processing	Output
A three-digit integer (`number`)	- Extract hundreds digit: `number / 100`	Hundreds digit
	- Extract tens digit: `(number / 10) % 10`	Tens digit
	- Extract ones digit: `number % 10`	Ones digit
	- (Optional) Validate that the input is between 100 and 999	Error if not a 3-digit number

Digits Reflection Log:

What I learned: How to break down a number into digits using integer division (`/`) and modulus (%).

What was difficult: Remembering the formula for the tens place.

What I would do differently next time: Add a loop so the user can try again if they type a number outside the valid range.

Overall reflection: This assignment helped me see how division and modulus work together to extract digits from numbers.

Digits Error Log:

Error	Cause	Fix
Wrong tens digit	Forgot to use `% 10` when extracting tens	Corrected formula: `(number / 10) % 10`
Negative input accepted	Did not check for valid range	Added validation `if (number >= 100 && number <= 999)`
Scanner error	Forgot to close Scanner	Added `sc.close()` at end

DivAndMod Reflection Log

What I learned: How to use a `for` loop to collect multiple inputs, how to sum with `+=`, and how to format decimal output.

What was difficult: Remembering to use `5.0` instead of 5 to force real division.

What I would do differently next time: Allow the user to enter any number of grades and calculate the average dynamically.

Overall reflection: This program reinforced the difference between integer and real division and gave me more practice with loops and formatting in Java.

DivAndMod Error Log:

Error	Cause	Fix
Average always an integer	Used `total / 5` (integer division)	Changed to `total / 5.0` (real division)
Wrong output format	Forgot to add %% when printing percent	Corrected to `%.1f%%%n`
Loop error	Accidentally used `i < 5` instead of `i <= 5`	Changed loop condition to `i <= 5`