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#include <stdio.h>

#define DIGITS 3
#define TEN 10
#define ZERO 0

//-----
//                                     Exercise 1
//                                     -----
//
// General : The program recognize if all digits are same.
//
// Input   : Number with 3 digits.
//
// Process : The program summarizes all the digits and divide by last digit.
//
// Output  : '0' if it is True, else is false.
//
//-----
// Programmer : Cohen Idan
// Student No : None
// Date       : 09.09.2019
//-----
void main(void)
{
    short num,
    temp,
    sum = ZERO;

    printf("Enter number with 3 digits: ");
    scanf("%hd", &num);

    // Take the first digit from right and add to sum
    temp = num / TEN;
    sum += num - (temp * TEN);
    num = temp;

    temp = num / TEN;
    sum += num - (temp * TEN);
    num = temp;

    sum += num;

    // Divide the sum by last digit from right and check if (Rest == 0) and
    // (result == (count of digits))
    temp = sum / num;
    sum %= num;
    sum = sum + DIGITS - temp;

    printf("If you got '0' then it is True, else is False: %hd\n", sum);
}
```