1. Write a Python program to calculate the sum of two numbers, a = 15 and b = 25, and print the result.
2. Subtract b = 45 from a = 100 and print the difference.
3. Multiply a = 8 and b = 12 and display the product.
4. Divide a = 56 by b = 7 and show the quotient.
5. Find the remainder when a = 29 is divided by b = 5.
6. Take two numbers as input from the user and perform all arithmetic operations (+, -, *, /, %).
7. Compute the average of three numbers entered by the user.
8. Find the area of a rectangle where length and width are given as inputs.
9. Compute the perimeter of a square given its side length as input.
10. Convert a temperature from Celsius to Fahrenheit using the formula:

$$Fahrenheit = (Celsius \times \frac{9}{5}) + 32$$

11. Count the Number of Digits in an Integer (Without Using Strings.
    Write a Python program to count the number of digits in a given number using only arithmetic operations.
    Example: **Input:** `num = 54321`
    Output: `5`
12. Find the Product of Digits of a Given Number.

    Write a Python program to compute the product of digits of a given number.

    Example: **Input:** num = 432

    Output: 4 × 3 × 2 = 24

13. Reverse the Digits of a Number Without Using Strings.

    Write a Python program to reverse a given number using arithmetic operators.

    Example: **Input:** num = 12345

    Output: 54321

14. Check Whether a Given Number is Palindrome.

    A number is a palindrome if it remains the same when its digits are reversed.

    Example: **Input:** num = 1221

    Output: "Palindrome"

    Input: num = 1234

    Output: "Not a Palindrome"

15. Sum of Even and Odd Digits Separately in a Number

    Write a program to find the sum of even and odd digits separately in a given number.

    Example: **Input:** num = 45126

    Output: Sum of Even Digits = 2 + 4 + 6 = 12

    Sum of Odd Digits = 5 + 1 = 6

16. Find the Difference Between the Sum of Odd and Even Digits.

    Modify the previous program to find the absolute difference between the sum of even and odd digits.

    Example: **Input:** num = 718295

    Output: | (7+1+9+5) - (8+2) | = |22 - 10| = 12

17. Check Whether a Number is an Armstrong Number.

    An Armstrong number is a number that is equal to the sum of its own digits raised to the power of the number of digits.

    Example:

    $153 = (1^3 + 5^3 + 3^3) = 1 + 125 + 27 = 153 \rightarrow$ Armstrong Number

    $9474 = (9^4 + 4^4 + 7^4 + 4^4) = 9474 \rightarrow$ Armstrong Number

    $123 \rightarrow$ Not an Armstrong Number

18. Convert a Number to Binary Without Using Built-in Functions.

    Write a Python program to convert a given number to binary using only arithmetic operations (/ and %).

    Example:

    Input: num = 10

    Output: 1010

19. Find the Greatest Digit in a Given Number.

    Write a program to find the largest digit in a given number.

    Example:

    Input: num = 4785

    Output: 8

20. Find the Smallest Digit in a Given Number.

    Write a program to find the smallest digit in a given number.

    Example:

    Input: num = 4785

    Output: 4

21. Write a Python program to check whether a given number is even or odd using the modulus operator.

22. Reverse a given number using arithmetic operations (without using strings).

23. Calculate compound interest using the formula:

$$A = P(1 + \frac{r}{n})^{nt}$$

24. Find the sum of the digits of a given number using modulus (%).

25. Swap two numbers without using a third variable.