1. Write a program that checks if a given number is prime or not by finding its factors.
2. Calculate the count of divisors for a given number.
3. Write a program that determines whether one number is divisible by another by checking the factors.
4. Create a program to calculate the sum of all the factors of a given number.
5. Implement a program to check if a number is perfect (equal to the sum of its factors excluding itself).
6. Determine whether a number is abundant (the sum of its factors is greater than the number itself).
7. Find pairs of amicable numbers (two numbers whose factors sum to each other).
8. Write a program to find highly composite numbers (numbers with more factors than others).
9. Write a program to find and display common factors of two numbers.
10. Find all multiples of a number within a range that share common factors with that number.