

1. Write a function to check if a given number is a power of two.
2. Write a program to convert a binary number to a decimal number.
3. Write a function to find the greatest common divisor (GCD) of a list of numbers.
4. Write a program to find the length of the longest palindrome in a given string.
5. Write a function to check if a given string is a pangram.
6. Write a program to find the number of characters in the longest word in a string.
7. Write a function to find the mode of a list of numbers.
8. Write a program to generate a random number between two given numbers.
9. Write a function to find the sum of the first n odd numbers.
10. Write a program to count the number of even and odd numbers in a list.
11. Write a function to find the maximum and minimum elements in a list.
12. Write a program to calculate the sum of all elements in a list.
13. Write a function to calculate the factorial of a number.
14. Write a program to print the Fibonacci sequence up to a given number.
15. Write a function to check if a given number is a palindrome.