**give frequently asked leetcode programs related to below topics , program title and number. Prime Number**

Sieve of Eratosthene  
Fibonacci series  
Pascal Triangle  
GCD using Euclidean  
LCM using GCD  
Decimal to Binary  
Exponentiation

Here are popular **LeetCode programs** for each of your listed topics, with their titles and problem numbers. These cover prime numbers, Fibonacci series, Pascal's Triangle, GCD/LCM, binary conversion, and exponentiation—all frequently referenced in coding interviews and technical rounds.[[1]](#fn1)[[2]](#fn2)[[3]](#fn3)[[4]](#fn4)[[5]](#fn5)[[6]](#fn6)[[7]](#fn7)[[8]](#fn8)[[9]](#fn9)[[10]](#fn10)

**Prime Number**

* **Count Primes** (204): Count all primes less than n.
* **Closest Prime Numbers in Range** (2523): Find closest prime pairs in a range.
* **Prime Number of Set Bits in Binary Representation** (762): Find numbers with a prime number of set bits.
* **Prime Pairs With Target Sum** (2824): Find prime pairs whose sum is n.
* **Prime Arrangements** (1175): Permute numbers where primes have special placements.[[11]](#fn11)[[12]](#fn12)[[13]](#fn13)[[14]](#fn14)[[1]](#fn1)

**Sieve of Eratosthenes**

* **Count Primes** (204): Uses sieve for efficient prime-counting.[[15]](#fn15)[[16]](#fn16)[[1]](#fn1)

**Fibonacci Series**

* **Fibonacci Number** (509): Classic computation, dynamic programming or matrix exponentiation.[[2]](#fn2)[[17]](#fn17)[[18]](#fn18)
* **Climbing Stairs** (70): Variant using Fibonacci; how many ways to reach the top.[[17]](#fn17)

**Pascal Triangle**

* **Pascal's Triangle** (118): Generate first n rows of Pascal's Triangle.
* **Pascal's Triangle II** (119): Return a specific row.[[3]](#fn3)[[19]](#fn19)[[20]](#fn20)[[4]](#fn4)[[21]](#fn21)

**GCD using Euclidean Algorithm**

* **Find Greatest Common Divisor of Array** (1979): Find GCD of smallest and largest array elements.
* **GCD Sort of an Array** (1998): Sort using GCD-based operations.
* **Greatest Common Divisor of Strings** (1071): Use Euclidean algorithm logic on strings.[[22]](#fn22)[[23]](#fn23)[[5]](#fn5)[[24]](#fn24)

**LCM using GCD**

* **Find the Maximum Factor Score of Array** (2547): Uses LCM and GCD together.[[25]](#fn25)
* **Maximum Subarray With Equal Products** (2924): Array products and LCM/GCD.[[26]](#fn26)

**Decimal to Binary**

* **Complement of Base 10 Integer** (1009): Convert decimal to binary, then flip bits.
* **Counting Bits** (338): For each number, count set bits; uses binary conversion.
* **Convert Binary Number in a Linked List to Integer** (1290).[[6]](#fn6)[[7]](#fn7)[[27]](#fn27)[[28]](#fn28)

**Exponentiation**

* **Super Pow** (372): Calculate a^b mod 1337, with b as array.
* **Count Good Numbers** (1922): Uses binary exponentiation.
* **Pow(x, n)** (50): Compute x^n.[[8]](#fn8)[[9]](#fn9)[[10]](#fn10)

**Frequently Asked LeetCode Programs Table**

|  |  |  |
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| Topic | Leetcode Problem Title | Problem Number |
| Prime Number | Count Primes | 204 [[1]](#fn1) |
| Prime Number | Closest Prime Numbers in Range | 2523 [[11]](#fn11) |
| Sieve of Eratosthenes | Count Primes | 204 [[1]](#fn1)[[15]](#fn15) |
| Fibonacci Series | Fibonacci Number | 509 [[2]](#fn2)[[17]](#fn17) |
| Pascal Triangle | Pascal's Triangle | 118 [[3]](#fn3) |
| Pascal Triangle | Pascal's Triangle II | 119 [[20]](#fn20) |
| GCD (Euclidean) | Find Greatest Common Divisor of Array | 1979 [[5]](#fn5) |
| GCD (Euclidean) | GCD Sort of an Array | 1998 [[24]](#fn24) |
| GCD (Euclidean) | Greatest Common Divisor of Strings | 1071 [[22]](#fn22) |
| LCM using GCD | Find the Maximum Factor Score of Array | 2547 [[25]](#fn25) |
| Decimal to Binary | Complement of Base 10 Integer | 1009 [[6]](#fn6) |
| Decimal to Binary | Counting Bits | 338 [[7]](#fn7) |
| Decimal to Binary | Convert Binary Number in LL to Int | 1290 [[27]](#fn27) |
| Exponentiation | Super Pow | 372 [[9]](#fn9) |
| Exponentiation | Pow(x, n) | 50 [[10]](#fn10) |
| Exponentiation | Count Good Numbers | 1922 [[8]](#fn8) |

These problems are considered **frequently asked** and serve as foundational coding challenge material for interviews and learning core algorithms.[[20]](#fn20)[[5]](#fn5)[[24]](#fn24)[[7]](#fn7)[[9]](#fn9)[[10]](#fn10)[[1]](#fn1)[[2]](#fn2)[[17]](#fn17)[[3]](#fn3)[[22]](#fn22)[[6]](#fn6)

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1. <https://leetcode.com/problems/count-primes/>

1. <https://www.youtube.com/watch?v=FggXDrgeI20>

1. <https://leetcode.com/problems/pascals-triangle/>

1. <https://algo.monster/liteproblems/118>

1. <https://leetcode.com/problems/find-greatest-common-divisor-of-array/>

1. <https://leetcode.com/problems/complement-of-base-10-integer/discuss/614590/easy-solution-c-modify-decimal-to-binary-conversion>

1. <https://leetcode.com/problems/counting-bits/discuss/1809813/easy-undestand-use-decimal-to-binary-conversion>

1. <https://leetcode.com/problems/count-good-numbers/discuss/1314375/binary-exponentiation-ologn>

1. <https://leetcode.com/problems/super-pow/>

1. <https://leetcode.com/problems/powx-n/>

1. <https://leetcode.com/problems/closest-prime-numbers-in-range/>

1. <https://leetcode.com/problems/prime-number-of-set-bits-in-binary-representation/>

1. <https://leetcode.com/problems/prime-pairs-with-target-sum/>

1. <https://leetcode.com/problems/prime-arrangements/>

1. <https://cp-algorithms.com/algebra/sieve-of-eratosthenes.html>

1. <https://www.geeksforgeeks.org/dsa/sieve-of-eratosthenes/>

1. <https://algomap.io/problems/fibonacci-number>

1. <http://leetcodethehardway.com/tutorials/math/matrix-exponentiation>

1. <https://dev.to/seanpgallivan/solution-pascal-s-triangle-154d>

1. <https://leetcode.com/problems/pascals-triangle-ii/discuss/38420/Here-is-my-brief-O(k)-solution>

1. <https://www.linkedin.com/pulse/pascal-triangle-problem-leetcode-satwik-jain>

1. <https://algo.monster/liteproblems/1071>

1. <https://www.youtube.com/watch?v=SvMYJpgxKYA>

1. <https://leetcode.com/problems/gcd-sort-of-an-array/>

1. <https://leetcode.com/problems/find-the-maximum-factor-score-of-array/>

1. <https://leetcode.com/problems/maximum-subarray-with-equal-products/>

1. <https://leetcode.com/problems/convert-binary-number-in-a-linked-list-to-integer/>

1. <https://leetcode.com/problems/number-of-1-bits/discuss/2061229/c-binary-to-decimal-or-decimal-to-binary-beats-100-0ms>

1. <https://leetcode.com/discuss/interview-question/1839249/finding-all-prime-numbers-from-1-to-n>

1. <https://www.youtube.com/watch?v=FSohIrjKv_U>

1. <https://just4once.gitbooks.io/leetcode-notes/content/other/euclidean-algorithm.html>

1. <https://leetcode.com/problems/convert-to-base-2/>

1. <https://leetcode.com/problems/number-complement/discuss/441476/easy-c-solution>

1. <https://leetcode.com/problems/partitioning-into-minimum-number-of-deci-binary-numbers/>

1. <https://www.reddit.com/r/leetcode/comments/1i4g1mb/problem_suggestions_for_matrix_exponentiation/>

1. <https://leetcode.com/problems/number-of-steps-to-reduce-a-number-in-binary-representation-to-one/>

1. <https://leetcode.com/problems/minimum-bit-flips-to-convert-number/>

1. <https://leetcode.com/problems/double-modular-exponentiation/>

1. <https://leetcode.com/problems/add-binary/>

1. <https://leetcode.com/problems/power-of-four/>

1. <https://leetcode.com/problems/power-of-two/>