ITERATIVE PROGRAM LIST

1. **Sum of 1ˢᵗ 20 prime number using a for loop**
2. **Print even numbers from 1 to 100 using a while loop**
3. **Print odd numbers from 1 to 100 using a do-while loop**
4. **Reverse a number using a for loop**
5. **Find the factorial of a number using a for loop**
6. **Display a multiplication table (1 to 10) using a for loop**
7. **Fibonacci series using a for loop**
8. **Find the sum of digits of a number using a while loop**
9. **Count the number of vowels in a string using a loop**
10. **Palindrome check using a loop**
11. **Sum of even numbers from 1 to N using a for loop**
12. **Sum of odd numbers from 1 to N using a while loop**
13. **Display prime numbers from 1 to N using a for loop**
14. **Check if a number is prime using a loop**
15. **Print numbers from 1 to 100 except multiples of 3 and 5 using a loop**
16. **Find the greatest common divisor (GCD) using a loop**
17. **Find the least common multiple (LCM) using a loop**
18. **Find all divisors of a number using a loop**
19. **Print the Fibonacci series up to N terms**
20. **Print a pyramid of stars using a loop**
21. **Check whether a string is a palindrome using a loop**
22. **Print the first N prime numbers**
23. **Find the sum of squares of the first N natural numbers**
24. **Display a triangle of numbers**
25. **Check if a number is Armstrong using a loop**
26. **Reverse a string using a loop**
27. **Count the number of even and odd numbers in an array using loops**
28. **Find the second largest number in an array using a loop**
29. **Find the average of an array using a loop**
30. **Print numbers in a spiral pattern using nested loops**
31. **Find the number of digits in a number using a loop**
32. **Generate a pattern of stars (e.g., diamond shape) using loops**
33. **Find the sum of odd digits in a number**
34. **Display a multiplication table of a given number using a while loop**
35. **Count how many prime numbers exist up to a given number**
36. **Print a matrix in spiral order using a loop**
37. **Find the number of vowels and consonants in a string**
38. **Find the maximum and minimum elements in an array**
39. **Print the factors of a number**
40. **Generate all the possible substrings of a string**
41. **Find the sum of the digits at even positions in a number**
42. **Find the sum of the digits at odd positions in a number**
43. **Display the elements of a 2D array using loops**
44. **Find the longest word in a sentence using a loop**
45. **Find the shortest word in a sentence using a loop**
46. **Check if a number is a perfect number**
47. **Check if a number is an Armstrong number**
48. **Print numbers in a triangular pattern**

49. **Find the common divisors of two numbers**
50. **Find the sum of the first N Fibonacci numbers**
51. **Generate a number pattern like Pascal's Triangle**
52. **Print a multiplication table in reverse order**
53. **Find the difference between the sum of even and odd numbers**
54. **Check if a given string contains only digits**
55. **Print a pattern like an inverted pyramid**
56. **Print numbers from 1 to N using a do-while loop**
57. **Count the number of digits in an array of numbers**
58. **Print a square matrix in a diagonal pattern**
59. **Print the Fibonacci series using a recursive function with loops**
60. **Count the occurrence of a specific character in a string**
61. **Check whether two strings are anagrams using a loop**
62. **Find the sum of the elements in a 2D matrix**
63. **Print a square of stars of size N using loops**
64. **Print an increasing number pattern**
65. **Print a decreasing number pattern**
66. **Print the sum of the first N even numbers**
67. **Print the sum of the first N odd numbers**
68. **Find the smallest element in an array**
69. **Find the largest element in an array**
70. **Find the total number of prime numbers in an array**
71. **Create a checkerboard pattern using loops**
72. **Print numbers in reverse order from N to 1**
73. **Print a zig-zag pattern with stars using loops**
74. **Display the Fibonacci sequence using a while loop**
75. **Print a half pyramid pattern of numbers**
76. **Print an inverted half pyramid of numbers**
77. **Find if a number is a power of two**
78. **Check if a number is a palindrome (reverse of number equals number)**
79. **Display a pattern of stars forming an X shape**
80. **Find the highest product of any two numbers in an array**
81. **Print the reverse of a string using a for loop**
82. **Print an alternating star pattern**
83. **Count occurrences of each digit in a number**
84. **Find the sum of digits divisible by 3 in a number**
85. **Display numbers in a spiral 2D matrix**
86. **Count the total number of positive and negative numbers in an array**
87. **Sum of all positive elements in a 2D array**
88. **Find the number of perfect squares up to N**
89. **Print a checkerboard pattern with alternating numbers**
90. **Find the second smallest number in an array**
91. **Find the sum of digits at even indexes in a number**
92. **Create a pattern that forms an hourglass shape with numbers**
93. **Find all palindromes in a given string**
94. **Find the number of non-zero digits in a number**
95. **Print the first N Fibonacci numbers recursively with loops**
96. **Generate a random 2D array and print its elements**
97. **Generate a multiplication matrix (N x N matrix)**
98. **Print a number pattern resembling a triangle**

99. **Count the occurrences of each character in a string using loops**