LOOP PROBLEMS

Easy Loop Problems

Print numbers 1 to n

Write a function printNumbers(n) that prints numbers from 1 to n
Input: 5
Output: 1 2 3 4 5

    1.

Sum of first n numbers

Write a function sumNumbers(n) that returns sum of numbers from 1 to n
Input: 4
Output: 10

    2.

Count even numbers

Write a function countEven(start, end) that counts even numbers in range
Input: 1, 10
Output: 5

    3.

Print multiplication table

Write a function multiTable(n) that prints multiplication table of n
Input: 3
Output: 3 6 9 12 15 18 21 24 27 30

    4.

Reverse a number

Write a function reverseNumber(n) that reverses digits of a number
Input: 1234
Output: 4321

    5.

Count digits

Write a function countDigits(n) that counts digits in a number

Input: 12345
Output: 5

6.

Print pattern of stars

Write a function starPattern(n) that prints n lines of stars
Input: 3
Output:
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7.

Find factorial

Write a function factorial(n) that returns factorial of n
Input: 5
Output: 120

8.

Sum of digits

Write a function sumDigits(n) that returns sum of digits
Input: 123
Output: 6

9.

Print even numbers

Write a function printEvens(start, end) that prints even numbers in range
Input: 2, 10
Output: 2 4 6 8 10

10.

Medium Loop Problems

Fibonacci series

Write a function fibonacci(n) that returns nth fibonacci number
Input: 7
Output: 13

1.

Prime number check

 Write a function isPrime(n) that checks if number is prime
Input: 17
Output: true

    2.

Armstrong number check

 Write a function isArmstrong(n) that checks if number is Armstrong
Input: 153
Output: true

    3.

GCD of two numbers

 Write a function gcd(a, b) that finds greatest common divisor
Input: 48, 18
Output: 6

    4.

Print prime numbers in range

 Write a function primeRange(start, end) that prints primes in range
Input: 10, 30
Output: 11 13 17 19 23 29

    5.

Diamond pattern

 Write a function diamond(n) that prints diamond pattern of size n
Input: 3
Output:
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    6.

Perfect number check

 Write a function isPerfect(n) that checks if number is perfect
Input: 28

Output: true

7.

Binary to decimal

Write a function binToDec(binary) that converts binary to decimal
Input: "1101"
Output: 13

8.

Count vowels in string

Write a function countVowels(str) that counts vowels using loops
Input: "hello world"
Output: 3

9.

Sum of squares

Write a function sumSquares(n) that returns sum of squares from 1 to n
Input: 3
Output: 14

10.