



VITE&TC PDTY23 ITPRODUCT

Problem Statement #13	Write a program to print all Natural numbers from 1 to N where you have to take N as input from user
Problem Constraint	$1 \leq N \leq 1000000$
Example Input	7
Example Output	1 2 3 4 5 6 7

Problem Statement #14	Write a program to print all Even and Odd numbers from 1 to N where you have to take N as input from the user.
Problem Constraint	$1 \leq N \leq 1000000$
Example Input	7
Example Output	Even: 2 4 6 Odd: 1 3 5 7



Problem Statement #15	You are given a positive integer N . You have to print the sum of all even numbers in the range [1, N] .
Problem Constraint	$1 \leq N \leq 1000$
Example Input	1
Example Output	0

Problem Statement #16	Take a number N as input, print its multiplication table having the first 10 multiples
Problem Constraint	$1 \leq N \leq 1000$
Example Input	2
Example Output	$2 * 1 = 2$ $2 * 2 = 4$ $2 * 3 = 6$ $2 * 4 = 8$ $2 * 5 = 10$ $2 * 6 = 12$ $2 * 7 = 14$ $2 * 8 = 16$ $2 * 9 = 18$ $2 * 10 = 20$

Problem Statement #17	<p>You are given a Bank account having N amount and you are asked to perform ADD (credit) and SUBTRACT(debit) operations.</p> <p>After each operation print the amount left in the Bank account. If the debit amount is greater than current balance print "Insufficient Funds"(without quotes) and the operation is skipped</p>
Problem Constraint	$1 \leq N, X \leq 10^{11}$ $1 \leq \text{Number of operations} \leq 10^5$
Example Input	<pre>1000 3 1 500 2 1400 2 500</pre>
Example Output	<pre>1500 100 Insufficient Funds</pre>

Problem Statement #18	<p>Take an integer N as input and print the count of its factors. The factor of a number is the number that divides it perfectly leaving no remainder</p>
Problem Constraint	$1 \leq N \leq 300$
Example Input	10
Example Output	<pre>4 Factors: 1 2 5 10</pre>

Problem Statement #19	Take T (number of test cases) as input. For each test case, take integer N as input and Print the count of digits of that number. Note: No of digits for number 0 is considered as 1.
Problem Constraint	$1 \leq T \leq 100$ $0 \leq N \leq 1000000000$
Example Input	2 100 10101
Example Output	3 5

Problem Statement #20	You have a number N , you have to write a code to find odd digit sum and even digit sum from given number and print it
Problem Constraint	$0 < N < 10000000000$
Example Input	8563724
Example Output	Sum of Odd Digit : 15 Sum of Even Digit : 20

Problem Statement #21	<p>You are given an integer N you need to print all the Armstrong Numbers between 1 to N</p> <p>If sum of cubes of each digit of the number is equal to the number itself, then the number is called an Armstrong number.</p> <p>For example, $153 = (1 * 1 * 1) + (5 * 5 * 5) + (3 * 3 * 3)$.</p> <p>Note: Consider 3 digit numbers</p>
Problem Constraint	$1 \leq N \leq 500$
Example Input	200
Example Output	1 153

Problem Statement #22	<p>You have a number N, you have to write a code to find Odd Index Digit Sum and Even Index Digit Sum from given number.</p> <p>Note : Index is starting from 1 till count of digits in a number, and we consider this from right to left</p>
Problem Constraint	$0 < N < 1000000000$
Example Input	4524126
Example Output	Sum of Odd Index Digit : 13 Sum of Even Index Digit : 11



Problem Statement #23	Given a number N , each time N gets divided by 2. How many times do we need to divide N by 2 in order to get 1 as the final result?
Problem Constraint	$1 \leq N \leq 1000$
Example Input	35
Example Output	5 $35 / 2 \rightarrow 17 / 2 \rightarrow 8 / 2 \rightarrow 4 / 2 \rightarrow 2 / 2 \rightarrow 1$

Problem Statement #24	Write a program to input T numbers(N) from user and print first and last digits of the given numbers.
Problem Constraint	$1 \leq T \leq 1000$ $0 \leq N \leq 1000000000$
Example Input	2 10023 1589
Example Output	1 3 1 9

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