



BASICS WORKSHOP

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1- Swap Two Numbers

- How to Swap Two Numbers
- Input : 5 6
- Output: 6 5

2- Sum From N to M

Write a program that allow user to insert two integers N and M and print the summation of all numbers between N and M .

3- N Divisors

Given a number N .

Print all the divisors of N in ascending order.

4- Digits

Given a number N .

Print the digits of that number from right to left separated by space.

5- Count Steps

- Enter Number and Count the number of steps require to make the Number equal to Zero.
 - if Number is Odd decrease one from it
 - If Number is Even divide it by 2
- Input : 15
- Output : 7

6- Sum Of Series

- Enter Number N and Find the sum of the series $1 + 11 + 111 + 1111 + \dots$ N terms

Input : 5

Output :

$1 + 11 + 111 + 1111 + 11111$

The sum of the series = 12345

7- Frequency Array

- Write a program to count the frequency of each element of an array.
- Input : 25 12 43 25 10
- *Output :*
The frequency of all elements of an array :
25 occurs 2 times
12 occurs 1 times
43 occurs 1 times

8- Diagonals of Matrix 2D

- Print the Diagonals (الاقطار) of Matrix 2D

- Input : 1 2 3
 4 5 6
 7 8 9

- Output: 1 3 5 7 9

9- Second Smallest Element in an Array

- Write a program to find the second smallest element in an array.
- Input : 5 7 2 1 8
- Output : 2

10- 4 Functions

- Create a program with 4 functions:

multiplication, division, summation, Subtraction,

Have the user to choose which operation to perform, and ask him if he wants to repeat the program, if so, let him choose an operation from the start.

11- Anagram

- Write a program to check whether two given strings are an anagram
- Input the first String : spare
Input the second String : pears
- *Expected Output* : spare and pears are Anagram