

## Assignment 3

1- Write a program that takes a number from the user then print yes if that number can be divided by 3 and 4 otherwise print no.

**Example (1)**

Input: 12

Output: Yes

**Example (2)**

Input: 9

Output: No

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2- Write a program that allows the user to insert an integer then print negative if it is negative number otherwise print positive.

**Example (1)**

Input: -5

Output: negative

**Example (2)**

Input: 10

Output: positive

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3- Write a program that takes 3 integers from the user then prints the max element and the min element.

**Example (1)**

Input: 7, 8, 5

Output:

max element = 8

min element = 5

**Example (2)**

Input: 3 6 9

Outputs:

Max element = 9

Min element = 3

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4- Write a program that allows the user to insert an integer number then check If a number is even or odd.

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5- Write a program that takes character from the user then if it is a vowel chars (a,e,I,o,u) then print (vowel) otherwise print (consonant).

**Example (1)**

Input: 0

Output: vowel

**Example (2)**

Input: b

Output: Consonant

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6- Write a program that allows the user to insert an integer then print all numbers between 1 to that number.

**Example**

Input: 5

Output: 1, 2, 3, 4, 5

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7- Write a program that allows the user to insert an integer then print a multiplication table up to 12.

**Example**

Input: 5

Outputs: 5 10 15 20 25 30 35 40 45 50 55 60

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8- Write a program that allows to user to insert number then print all even numbers between 1 to this number

**Example:**

Input: 15

Output: 2 4 6 8 10 12 14

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9- Write a program that takes two integers then prints the power.

**Example:**

Input: 4 3

Output: 64

**Hint:** how to calculate  $4^3 = 4 * 4 * 4 = 64$

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10- Write a program to enter marks of five subjects and calculate total, average and percentage.

**Example**

Input: - Enter Marks of five subjects: 95 76 58 90 89

Output: Total marks = 408

Average Marks = 81

Percentage = 81

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11- Write a program to input the month number and print the number of days in that month.

**Example**

Input: Month Number: 1

Output: Days in Month: 31

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12- Write a program to create a Simple Calculator.

13- Write a program to allow the user to enter a string and print the REVERSE of it.

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14- Write a program to allow the user to enter int and print the REVERSED of it.

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15- Write a program in C# Sharp to find prime numbers within a range of numbers.

Test Data :

Input starting number of range: 1

Input ending number of range : 50

*Expected Output :*

The prime number between 1 and 50 are :

2 3 5 7 11 13 17 19 23 29 31 37 41 43 47

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16- .Write a program in C# Sharp to convert a decimal number into binary without using an array.

Test Data :

Enter a number to convert : 25

*Expected Output :*

The Binary of 25 is 11001.

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17- Create a program that asks the user to input three points (x1, y1), (x2, y2), and (x3, y3), and determines whether these points lie on a single straight line.

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18- Within a company, the efficiency of workers is evaluated based on the duration required to complete a specific task. A worker's efficiency level is determined as follows:

- If the worker completes the job within 2 to 3 hours, they are considered highly efficient.
- If the worker takes 3 to 4 hours, they are instructed to increase their speed.
- If the worker takes 4 to 5 hours, they are provided with training to enhance their speed.
- If the worker takes more than 5 hours, they are required to leave the company.

To calculate the efficiency of a worker, the time taken for the task is obtained via user input from the keyboard.

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19- . Write a program that prints an identity matrix using for loop, in other words takes a value n from the user and shows the identity table of size  $n * n$ .

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20- Write a program in C# Sharp to find the sum of all elements of the array.

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21- Write a program in C# Sharp to merge two arrays of the same size sorted in ascending order.

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22- Write a program in C# Sharp to count the frequency of each element of an array.

23- Write a program in C# Sharp to find maximum and minimum element in an array

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24- Write a program in C# Sharp to find the second largest element in an array.

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25-. Consider an Array of Integer values with size N, having values as in this Example

7	0	0	0	5	6	7	5	0	7	5	3
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write a program find the longest distance between Two equal cells. In this example. The distance is measured by the number Of cells- for example, the distance between the first and the fourth cell is 2 (cell 2 and cell 3).

In the example above, the longest distance is between the first 7 and the 10th 7, with a distance of 8 cells, i.e. the number of cells between the 1st And the 10th 7s.

**Note:**

- Array values will be taken from the user
- If you have input like 1111111 then the distance is the number of Cells between the first and the last cell.

26- Given a list of space separated words, reverse the order of the words.

Input: this is a test                      Output: test a is this

Input: all your base                      Output: base your all

Input: Word                                  Output: Word

**Note :**

Check the **Split Function** (Member in String Class) Output will be a Single Console.WriteLine Statement

27- Write a program to create two multidimensional arrays of same size. Accept value from user and store them in first array. Now copy all the elements of first array on second array and print second array.

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28- Write a Program to Print One Dimensional Array in Reverse Order