

C# Exercise – 1

1. Write a program that reads 3 integer numbers from the console and prints their sum.
2. A company has name, address, phone number, fax number, web site and manager. The manager has first name, last name, age and a phone number. Write a program that reads the information about a company and its manager and prints them on the console.
3. Write a program that reads two positive integer numbers and prints how many numbers p exist between them such that the remainder of the division by 5 is 0 (inclusive).
Example: $p(17,25) = 2$.
4. Write a program that gets two numbers from the console and prints the greater of them.
5. Write a program that gets a number n and after that gets more n numbers and calculates and prints their sum.
6. Write a program that reads an integer number n from the console and prints all the numbers in the interval $[1..n]$, each on a single line.
7. Write a program that reads a string, reverses it and prints it on the console. Example: "sample" → "elpmas".
8. You are given a text. Write a program that changes the text in all regions surrounded by the tags `<upcase>` and `</upcase>` to uppercase. The tags cannot be nested.

Example:

Input :

We are living in a `<upcase>`yellow submarine`</upcase>`. We don't have
`<upcase>`anything`</upcase>` else.

OutPut :

We are living in a YELLOW SUBMARINE. We don't have ANYTHING else.

9. Write a program that reads from the console a string of maximum 20 characters. If the length of the string is less than 20, the rest of the characters should be filled with '*'. Print the result string into the console.
10. Write a program that extracts from a given text all sentences containing given word.
Example: The word is "in". The text is:

We are living in a yellow submarine. We don't have anything else. Inside the submarine is very tight. So we are drinking all the day. We will move out of it in 5 days.

OutPut :

We are living in a yellow submarine.

We will move out of it in 5 days.

- 11** We are given a string containing a list of forbidden words and a text containing some of these words. Write a program that replaces the forbidden words with asterisks. Example:

Microsoft announced its next generation PHP compiler today. It is based on .NET Framework 4.0 and is implemented as a dynamic language in CLR.

OutPut:

***** announced its next generation *** compiler today. It is based on .NET Framework 4.0 and is implemented as a dynamic language in ***.

- 12.** Write a program that parses an URL address given in the format:

[protocol]://[server]/[resource]

and extracts from it the [protocol], [server] and [resource] elements. For example from the URL <http://www.devg.org/forum/index.php> the following information should be extracted:

[protocol] = "http"

[server] = "www.devg.org"

[resource] = "/forum/index.php"

- 13.** Write a program that reverses the words in given sentence.

Example: "C# is not C++, not PHP and not Delphi!"

Out Put → "Delphi not and PHP, not C++ not is C#!".

- 14** Write a program that reads a string from the console and prints all different letters in the string along with information how many times each letter is found.

- 15** Write a program that reads a string from the console and lists all different words in the string along with information how many times each word is found.

- 16** Write a program that reads a string from the console and replaces all series of consecutive identical letters with a single one. Example: "aaaaabbbbcbdddeeedssaa" → "abcdedsa".