

## The laboratory work 1

### Simple operations

1. Write a C# program to print the result of adding 12 and 13 on screen.
2. Write a C# program to print the result of dividing 24 into 5 on screen.
3. Create a C# program to print the result of the following operations:

$-1 + 3 * 5$

$(24 + 5) \% 7$

$15 + -4 * 6 / 11$

$2 + 10 / 6 * 1 - 7 \% 2$

4. Write a C# program to print on screen the result of adding, subtracting, multiplying and dividing two numbers typed by the user. The remainder of the division must be displayed, too.

It might look like this:

Enter a number: 12

Enter another number: 3

$12 + 3 = 15$

$12 - 3 = 9$

$12 \times 3 = 36$

$12 / 3 = 4$

$12 \bmod 3 = 0$

5. Write a C# program to ask the user for his age (20, for instance) and answer something as "You look younger than 20" (instead of 20, you should display the age that has been entered).
6. Write a program which asks for a symbol and a width, and displays a triangle of that width, using that number for the inner symbol, as in this example:

Enter a symbol: 4

Enter the desired width: 5

44444

4444

444

44

4

7. Write a program to ask the user for his/her name and his/her password (both must be strings) and repeat it as many times as necessary, until the entered name is "Varian" and the password is "Storm".
8. Write a program which asks the user for his login and password. Both must be strings. After 5 wrong attempts, the user will be rejected.

9. Write a program which asks the user for two numbers and an operation to perform on them (+,-,\*,x,/) and displays the result of that operation, as in this example:

Enter first number: 5

Enter operation: +

Enter second number: 7

5+7=12

10. Calculate the perimeter, area and diagonal of a rectangle, given its width and its height.  
(Hint: use  $y = \text{Math.Sqrt}(x)$  to calculate a square root)