



## Exercise №2

**Task №1.** Write a C# Sharp program to print on screen the output of adding, subtracting, multiplying and dividing two numbers which will be entered by the user.

Test data: number\_1=5, number\_2=5

Result: adding = 10, subtracting = 0, multiplying = 25, dividing = 1

**Task №3.** Write a C# Sharp program that takes four numbers as input to calculate and print the average.

Test data: number\_1=10, number\_2=15, number\_3=25, number\_4=10

Result: average value = 15

**Task №4.** Write a C# Sharp program to that takes three numbers(x,y,z) as input and print the output of (x+y)·z and x·y + y·z.

Test data: x=1, y=2, z=3

Result: (x+y)\*z = 6, x\*y + y\*z = 2 + 6 = 8

**Task №5.** Write a program that checks if an integer is even or odd.

**Task №6.** Write a C# program to convert from Celsius degrees to Kelvin and Fahrenheit.

Help: Kelvin = Celsius + 273, Fahrenheit = Celsius \*18 / 10+32

**Task №7.** Write a C# Sharp program that takes three letters as input and display them in reverse order.

Test letters: letter\_1=b, letter\_2=a, letter\_3=t

Result: tab

**Task №8.** Write a C# Sharp program that takes the radius of a circle as input and calculate the perimeter and area of the circle.

Help:  $P=\pi*r*2$ ,  $\pi=3,14$

**Task №9.** Write a C# Sharp program that takes the radius of a sphere as input and calculate and display the surface and volume of the sphere.

Помощь:  $A=4*\pi*r^2$ ,  $V = \frac{3}{4}*\pi*r^3$

**Task №10.** Write a program that checks if a number is divisible by 5, with or without an overage.

## Homework +

**Task №1.** Write a program that calculates and prints in the console the area and the perimeter of the right triangle.

Test data: a=3, b=4, c=5

Result: P=12, S=6

Help: formula for perimeter of right triangle –  $P = a + b + c$ , for area–  $S = (a * b) / 2$

**Task №2.** Write a C# Sharp program that takes a character as input and check the input (lowercase) is a vowel, a digit, or any other symbol.

Help: Realize the program by using Latin vowels letters – a, e, i, o, u.

**Task №3.** Write a C# Sharp program that takes a decimal number as input and displays its equivalent in binary form.

Test data: 25



Result: **11001**

**Task №4.** Write a program that can do the operations bellow for a given four-digit number in “absd” format (for example 2017):

- Calculates the sum of the four digits ( $2 + 0 + 1 + 7$ );
- Prints the digits in reverse order: dcba (for example number the result should be 7102);
- Puts the last digit in first place: dabc (for the example number the result should be 7201);
- Switches the places of the second and the third digits: acbd (for example number the result should be 2107).