Lab 2 (CS): Introduction to Operating Systems

Shokhista Ergasheva, Muwaffaq Imam, Artem Kruglov,
Nikita Lozhnikov, Giancarlo Succi, Xavier Vasquez
Herman Tarasau, Firas Jolha

Innopolis University
Course of Operating Systems

Week 02 – Lab

- Create a program that declares integer, float and double variables
- Find out how to assign maximum values for each variable (hint: use `INT_MAX` for integer, etc.)
- Print sizes and values of each variable
- Discuss the results
- **Note: use tutorial as your primary reference**

- Write a program that prompts the user for a string, and prints its reverse
- Hints:
    - a string in C is an array of chars (more about arrays next week)
    - use `strlen()` function to get the length of a string
    - you can use `printf()`, `puts()` or even `putchar()` functions to print

- Write a function that outputs a right-side-up triangle of height n and width 2n-1. Your program must accept n as a command line parameter; the output for n = 6 would be:

$$\star$$

$$\star \, \star \, \star$$

$$\star \, \star \, \star \, \star \, \star$$

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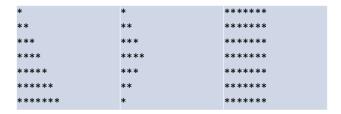
- **Hint: use sscanf() to convert string to int**

- Write a program that asks user to input two integers and swaps them using a separate function
- **Hint: you will need to pass parameters by reference**

- Add several functions to your ex3.c file, so user could print different figures on his choice;
  examples are:

```
*                  *                  *******
**                 **                 *******
***                ***                *******
****               ****               *******
*****              ***                *******
******             **                 *******
*******            *                  *******
```

End of lab 2 (OS)