Exercise 1

- 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**

Exercise 2

- 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

Exercise 3

- 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:

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

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

Exercise 4

- 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**

Exercise 5 (optional)

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

*	*	*******
**	**	*******
***	***	*******
****	****	*******
*****	***	*******
******	**	*******
*******	*	*******