Lab 3.3.2 Writing and using your own functions – basics

Objectives

Familiarize the student with:

- projecting and writing parameterized functions;
- utilizing the `return` statement;
- utilizing her/his own functions.

Scenario

Your task is to write and test a function which takes two arguments (a year and a month) and returns the number of days for the given month/year pair (yes, we know that only February is sensitive to the year value, but we want our function to be universal). The initial part of the function is ready. Now, convince the function to return `None` if its arguments don't make sense.

Of course, you can (to be honest: you should!) use the previously written and tested function. It may be very helpful (we cannot say anything more, sorry). We encourage you to use a list filled with the months' lengths. You can create it inside the function – this trick will significantly shorten the code.

We've prepared a testing code. Expand it to include more test cases.

```python
def IsYearLeap(year):
#
# your code is already here
#
def DaysInMonth(year,month):
#
# put your new code here
#
testyears = [1900, 2000, 2016, 1987]
testmonths = [ 2, 2, 1, 11]
testresults = [28, 29, 31, 30]
for i in range(len(testyears)):
    yr = testyears[i]
    mo = testmonths[i]
    print(yr,mo,"->",end="")
    result = DaysInMonth(yr,mo)
if result == testresults[i]:
    print("OK")
else:
    print("Failed")
```