

Python Test, 13.00 - 15.00

Rules

- You must pass all exercises to pass the test,
- Aids: Paper, pen, your laptop, VS Code, the website `docs.python.org/3/library/`.
- No documentation of the code is needed.

Exercise 0 (Preparation)

Create a new folder in Visual Studio Code entitled `python_test` and store all Python test related files in that project. Close all other files!

Exercise 1

Create a Python program called **year.py** having a function `date_converter(s)` that takes a string `s` containing a date in American format (MM/DD/YY) and converts it to the Swedish YYYY-MM-DD that it returns as a string. The main part of the program should ask for the date and pass it to the function after which it will print the resulting Swedish date.

```
Write an American date: (MM/DD/YY): 10/07/22
Swedish date: 2022-10-07
```

Exercise 2

Create a Python program `exclusive_or.py` containing a function `xor(a, b)` that takes two boolean values `a` and `b`, and returns `True` if either `a` or `b` is `True` (but not both), and `False` in all other cases. That is, for input `True, False` and `False, True` it should return `True`, and for `True, True` and `False, False` it should return `False`. Also, add program code that demonstrates how the function can be used.

Exercise 3

Create a Python program `print_odd.py` that reads an arbitrary number of positive integers from the keyboard. You type a negative to stop the reading process. The program ends by printing all the *odd integers* among the given numbers (negative number not included). An execution might look like this:

```
Provide integers and stop with a negative
Number 1: 6
Number 2: 7
Number 3: 9
Number 4: 20
Number 5: 13
Number 6: -5

Odd numbers
7
9
13
```