

**Programming
Winter 2023**

Exercises

Number 01, Submission Deadline: 2pm October 25, 2023

1. Find 1-2 fellow classmates to team up with for jointly solving and submitting the weekly exercise sheets (this included). You can use the following thread in Moodle to get in contact with your classmates: (2 P)

<https://moodle.uni-bielefeld.de/mod/choicegroup/view.php?id=161449>

Then, send me an email (lpianesi@cebitec.uni-bielefeld.de) with a list of group members.

2. Install Anaconda <https://www.anaconda.com/download> on your system. Then start the Anaconda Navigator and launch the application “Qt Console”, which provides an interactive Python console. Familiarize yourself with the console and do your first trials in programming with Python. (2 P)

3. In the lecture, you were introduced to the `type()` function that allows you to check the type of variables. This exercise introduces another very useful function called `print()` which allows you, e.g., to display text on the console. For instance, you can report the result of a calculation in a full sentence. The Python commands (6 P)

```
a = 15 ** 3 + 1
print('Math 101:\n15^3 + 1 equals', a, 'and 4 x 4 equals', 4*4)
```

will result in the following output:

```
Math 101:
15^3 + 1 equals 3376 and 4 x 4 equals 16
```

Notice that the characters “`\n`” induce a line break. Similarly, “`\t`” induces a *tab character*, i.e., a larger white space.

Identify and correct the mistakes made in the following Python statements. (*Bonus: guess whether the mistake corresponds to a syntactic or semantic error.*)

- (a) `print('In the Year 2525)`
- (b) `print('I was' 2000, 'Light Years From Home')`
- (c) `print('One n\After \n909')`
- (d) `print('Space 1000' * 2)`
- (e) `print('Back to', 0//(8*3-24))`
- (f) `print('The numeric type of', 42 // 3, 'is', print(42 // 3))`

Important: You must submit your solutions as PDF file