CHAPTER 2 - INTRODUCTION TO PYTHON

2.1

Python is interactive because it allows writing instructions directly in its command prompt (the shell) without needing to create or modify a source file.

2.2

Useless chapter

2.3

IDLE (Integrated Development and Learning Environment) has two elements:

1. Shell - used in interactive mode, allows to type and execute single statements and immediately see the result. It is the Python interpreter.

2. Editor - used in script mode, allows to create actual programs, which can be saved in the computer’s memory (.py extension) and be executed at any time

The symbols >>> represent the prompt, meaning Python awaits the insertion of a statement, after the statement is inserted press the Enter key, if the statement is wrong an error message will be displayed.

There is no way to clean up the shell window, the only way is to restart it by either pressing Ctrl+F6 or going to Shell —> Restart Shell

The colors used in Python are:

- purple = built-in functions

- green = strings and comments outside of the code lines

- blue = outputs and defined names

- red = errors and comments next to the code lines

- orange = Python keywords

2.4

If a syntax error is detected when the program is run, an invalid syntax message will be displayed, and the error’s location will be highlighted

To wrap long statements within the editor only for imroved readability use the backslash \

2.5

A program’s syntax is the set of rules to be strictly followed when programming

The set of keywords or reserved keywords cannot be used in other contexts.

(pyhton keywords are at page 29 - volume 1)

The decimal separator in python is the dot

Strings must be enclosed in quotes (‘ ‘) or quotation marks (“ “)

Calculations between strings cannot be performed

The two operators that work with strings are:

1. + (performs a concatenation)

2. \* (performs a repetition)

There are 2 types of errors:

1. Syntax error

2. Error during program execution

2.6

Comments are short notes, they can be inserted in two ways:

1. Following a line of code, preceded by the symbol #

2. Between lines of code and at the beginning of the program (in this case they are called documentation strings), preceded by # and in triple quotes (‘’’ ‘’’) or triple quotation marks (“”” “””)

2.7

Escape codes are characters preceded by a backslash \ placed inside a string which perform specific actions.

n\ wraps text

t\ tabulates text

(other examples at page 33 - volume 1)

2.8

A function is a set of pre-packaged codes that performs a certain operation.

The print function displays its argument, several arguments can be concatenated by writing them all in quotes and dividing them using commas and specifying the separator at the end by typing sep=‘ insertheredesiredtypeofsepartor ‘

(other built-in functions are at page 36 - volume 1)

2.9

The help function provides a description of its argument