Part I : General Concepts

1: What are the differences between machine language and high level language?

Machine lenguaje can be identified by machines, which is made by binary numbers 0 n 1, and it’s interpreted by machines easier compared to high level language, which is understood by humans easier.

2: What are the advantages and disavantages of working with a high level language?

High level language has the advantage of better comprehension at the time of programming and better execution speed compared to low level language, though high level language has bigger memory consuption compared to low level language.

3:I need to execute a program that allows me to do stadistical graphs.

(a) If the program is written in C++, do i need the C++ compiler?

Yes, it is neccesary in order to transform the human language to machine language.

(b) If the program is written in Python, do i need the Python interpreter?

Yes, it allows the ejecution of instructions written in high level language without need of a compiler.

4: What advantages do you think working with free software has?

Availability for students to learn, usually they’ll be allowed to Access and modify the source code.

5:What’s an IDE?

IDE Means Integrated development enviroment, which is a tool used for software developing with more ease.

Part II : Python first steps

6: Execute the following instructions

1. print “hello”

2. print 2+3

3. print “2”+”3”

4. print 2\*(3+5)

5. print 2\*3+5

6. print 3\*”hello”

7. print “hello” \* 3

8. PRINT “hello”

9. print hello

a) compare the results obtained between 2 and 3, 4 and 5, 6 and 7

2 y 3 = in 2 the execution is done as instructed, while in 3 it’s not possible because of the incorrect use of the double right quotation marks

4 y 5 = in 4 the multiplication is done on both numbers thanks to the use of parenthesis, in 5 it’s only being multiplied by 3 from the lack of parenthesis

6 y 7 = neither of them is posible to execute from the use of doublé right quotation marks.

b) what happened with 8 y 9?

8 can’t be executed because of the upper case print and double right quotation marks and 9 can’t be execute because of the lack of quotes

7: Execute the next instructions:

8. “hello”

9. 2+3

a) ¿Could you do it?

No

b) compare with 1 n 2 from the previous exercise

not posible because of the lack of print command, so nothing displays on the command screen