CICLO 1

[FORMACIÓN POR CICLOS]

INGLÉS

Lectura reto 4:

In the fall 2020 semester, I was assigned to teach a course called “Programming for Data Analytics” (DANL100) to our business school students. At the very beginning, I thought that R would be the sole computational tool. After a zoom meeting with Christian, the area coordinator of our Data Analytics program, it was a shock to learn that both R and Python had to be taught. After teaching R to finance-major students a dozen times, I knew first-handedly how challenging it was for business school students to learn coding. I thought that it was a crazy idea to teach both R and Python within a semester to the first-year students who have no clue about programming.

However, after one-semester’s struggle alongside with my students, my perception for this course has changed dramatically. Yes, it is possible to learn both R and Python for most business school students. One added advantage is that this course could be viewed as a screener for our Data Analytics program. The logic is that if you are not good at programming, it is difficult to pursue a Data Analytics career.

In this paper, my related teaching experiences are summarized into 8 factors or areas. This paper is organized in the following way. In the next section, I present the first factor: writing my own lecture notes. The major reason is to make the whole course, divided between R and Python, more consistent and comparable (explained later in the paper). Section 3 explains why it is a good idea to use familiar concepts and formulae for business school students. Obviously, this would reduce their frustration when learning programming. In section 4, I will demonstrate how to use very simple programs, such as one-line or a few lines programs, to boost our business school students’ confidence. Hands-on experiences or in-class exercises are critical for leaning a programming language. In total, I have close to 70 in-class exercises. This topic is discussed in depth in Section 5. Appendix G gives a partial list for the in-class exercises. Section 6 shows a few very useful utility functions. For example, over 1,000 small programs, written in both R and Python, are offered for this course. Students can search those programs by chapter or a key word by using a function called. search Code (). To make my teaching more efficient, the function called. Show Code () can be used to present the code, i.e., showing the code on a student’s computer screen. Thus, both instructors and students can copy-and-paste related programs to do an in-class exercise. The last section concludes the paper.

History of Python (2022). Retrieved 3 February 2022, from:

Material tomado de: General Python FAQ - Python 3.9.5 documentation (2021). Doc.