History of Computing Environments for Analytics

From http://whatis.techtarget.com/definition/environment the definition of environment is:

> *In computers, the term environment when unqualified usually refers to the combination of hardware and software in a computer . In this usage, the term platform is a synonym. We often tend to think of environment as short for operating system environment , but, with the exception of UNIX -based operating systems, the operating system usually implies an underlying hardware microprocessor that the operating system is designed to run on.*
>
> (whatis.techtarget.com, 2017)

To understand what is in the "black box" we are operating to do analyses we need to know something about the environment including both hardware and software, not everything but just enough.

1. For hardware, start by reading the "Advanced Computing Environment" at: https://en.wikipedia.org/wiki/Advanced_Computing_Environment and related links as desired.
2. For operating environments, start by reading "Operating Environment" at: https://en.wikipedia.org/wiki/Operating_environment and related links as desired.
3. For API's (application programming interfaces), start by reading "Application programming interface" at: https://en.wikipedia.org/wiki/Application_programming_interface and related links as desired.
4. For functional programming, start by reading "Functional programming" at: https://en.wikipedia.org/wiki/Functional_programming and related links as desired. Pay particular attention to the sections on the history of and concepts about functional programming on this webpage. That leads to the comparison of functional programming to the more traditional programming often called imperative programming which you can read more about at: https://en.wikipedia.org/wiki/Imperative_programming.
5. For software, start by reading "Comparison of programming languages" at: https://en.wikipedia.org/wiki/Comparison_of_programming_languages and related links as desired.
6. Also, read "Shell script" at: https://en.wikipedia.org/wiki/Shell_script and related links as desired. You can get more information about Unix shell and shell tools at: http://datascienceatthecommandline.com/.

References:

whatis.techtarget.com. Retrieved from http://whatis.techtarget.com/definition/environment April 24, 2017.