KJC4 4 CREDITS

READ/READLINE/READLINES ESSAY

NOTE : This is written from my experience with all three methods(readline() , readlines() and read() )

The readline() method may be advantageous when trying to extract some text from a file line by line but do not want the entire text . It is also very useful in illustrating how certain loops are implemented in programming languages. The unique property this method has of returning an empty string at the end of a file is useful in developing end of file loops for data processing applications. However, the fact that it needs to be used in conjuction with a loop is not very desirable. Not only does it require more lines of code to accomplish a task , it also takes away from the simplicity of the code. Also, executing a loop in conjuction with the readline() method is more cumbersome and will engender a longer execution time taking up system resources that could be used for other tasks. The readline() method can also prove very difficult for one who is not very familiar with its workings seeing that it reads a line and just stops at the end of that line.

Th readlines() method reads the entire file into a list and then the list is looped through one element at a time. This method may be desirable when trying to extract section of a file based on indices of certain strings. Since extracting a section of a file usually involves splitting a text based on certain attributes observed in the file, this method may prove more direct. It is a lot more straightforward than using the readline method and It is also very useful when the structure of the file is well understood by the user. However , If that is not the case it could also be a very difficult task trying to employ this method seeing as the file has already been manipulated in order for it to be put into the list. An understanding of how the list structure works is mandatory to use this method of reading files to process data. It is also not desirable when you would like to work with the text file in its basic format. Having to loop through the list is not only a time consuming process, it also requires longer code taking away from the simplicity, brevity and efficiency of the code.

The read() method reads in the entire file as a string. This method is usually the most desirable of the three methods being that the file is read in with its natural formatting intact. It take fewer lines of code and still accomplishes the same task of reading in the file. It is also simpler and its functionality is easily understandable. It is useful if you are interested in reading in a file all at once. However, it may not be desirable for text extraction since the entire file has to be read in first. This will then have to be split based on certain properties before other methods can be employed to find certain strings you are searching for. Though this method of processing files does not usually require the use of a loop. It could be just as time consuming trying to manipulate the file.

Each of the above methods has its benefits and the choice of which of the method to employ depends on the task at hand and preference of the user.