MATH96012 Project 2

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November 15, 2019

Part 1.3

Discussion for question 1.3 here
I used the final version of the cost function provided to compute the cost. My primary reason for doing this was because it involved fewer summation terms, so is less computationally expensive to run in Fortran.

Part 2.3

Discussion for question 2.3 here First, a huge advantage of using Python for mlrmodel would be the vast, available built-in functions within numpy and scipy, that make certain procedures, such as element-wise comparisons of arrays to check 'if/else' conditions much quicker. Additionally, I was unable to use effective lift comprehension in Fortran, which is simpler to implement in Python. This would have made vectorising the main for-loop routines simpler. The process of pre-allocation is considerably simpler in Python.
However, Fortran, as a compiled language, is significantly faster than Python for the number-crunching involved in mlrmodel.

Part 2.4

Discussion for question 2.4 here Unfortunately, I was unable to get the MPLClassifier to work in my code, and I did not have enough time to figure out what was wrong and fix it.
