

AOS4 : Exercise involving weighted average, value functions and Python - Explanation

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The point of this exercise is to illustrate that weighted average models can be limited in their expressiveness and that a simple tweak to improve them is the use of a function representing utility on each criterion. It also shows a practical case (although somewhat artificial) of why building such a model could be useful. Besides, it allows the person doing the exercise to practice a simple Python implementation of these ideas. It also makes them recall the formal definitions of a concave function, which can be useful when trying to build a model with marginal diminishing returns.