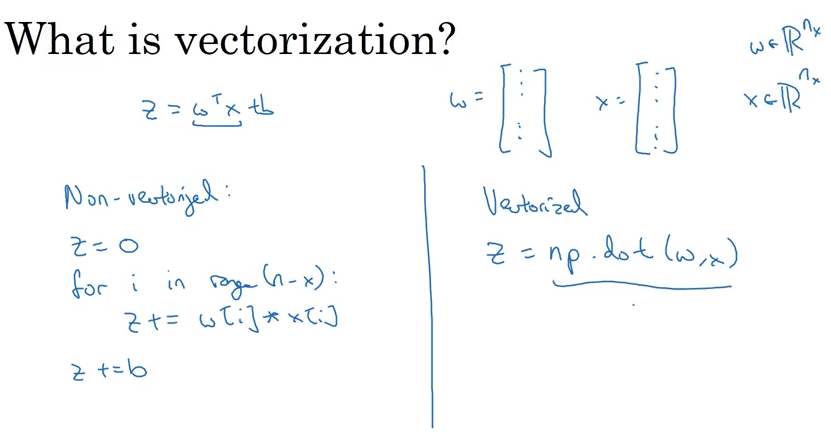
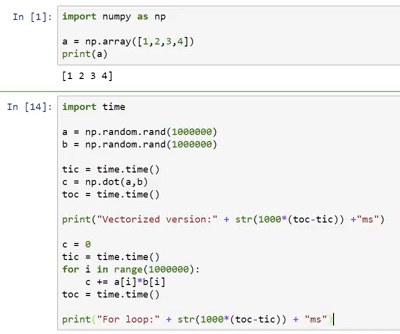
**Vectorization**

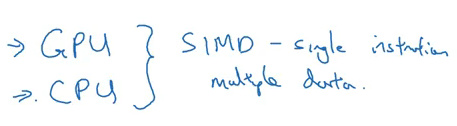
The art of getting for loops out of your code. With a large dataset, without for loops your code will run forever.



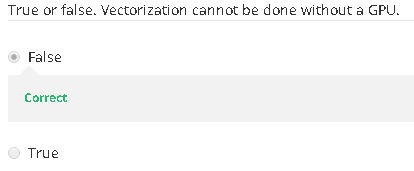
Vectorization vs. For Loop



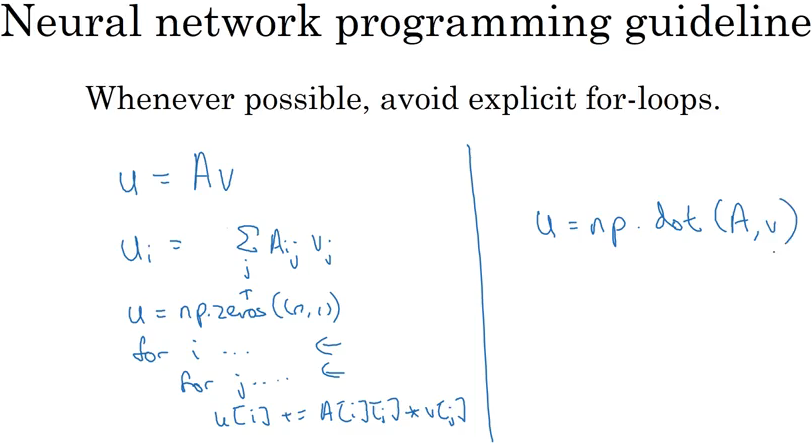


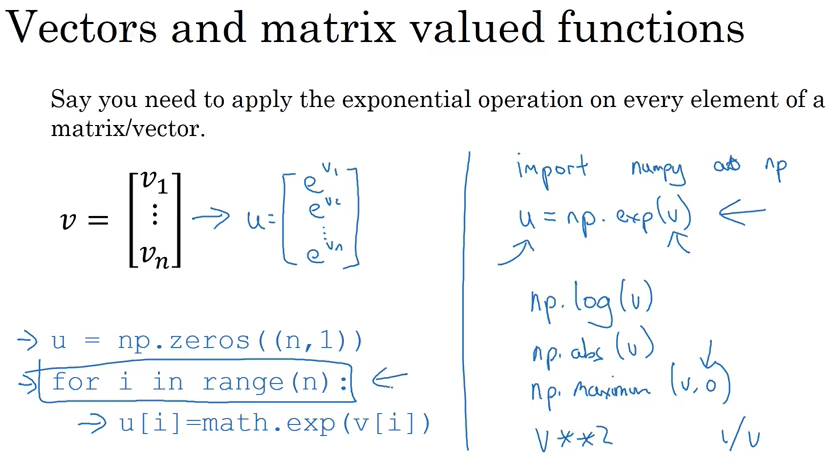


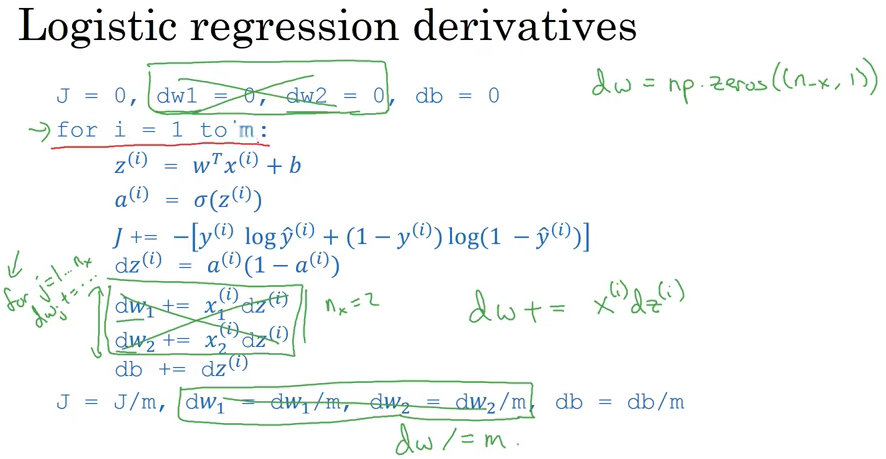
Whenever possibly, avoid explicit for loops

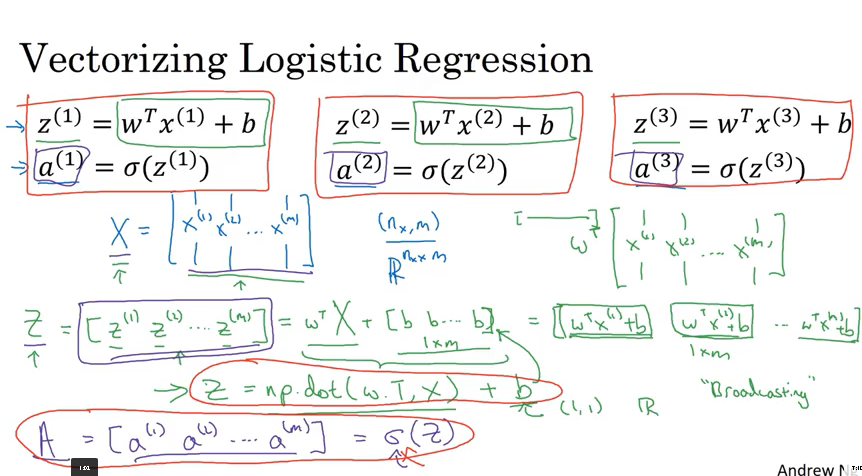


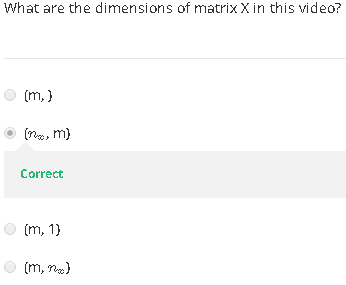
**More Vectorization Example**











**Vectoring Logistic Regressions Gradient Output**

