Lec 9 AI - Numpy things

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From lecture 8 - slide 12

$$\begin{split} f &= \text{np.array}([[0.6,\,0.4],\,[0.1,\,0.9]);\\ g &= \text{np.array}([[0.2,\,0.8],\![0.3,\!0.7]]);\\ \frac{a/b & 0 & 1}{0 & 0.6 & 0.4}\\ 1 & 0.1,\,0.9\\ \frac{b/c & 0 & 1}{0 & 0.2 & 0.8}\\ 1 & 0.3 & 0.7 \end{split}$$

$$\begin{array}{l} \mathrm{f.reshape}(2(A),\!2(B),\!1(C)) \\ \mathrm{g.reshape}(1(A),\,2(B),\,2(C)) \\ \mathrm{h} = \mathrm{f} \ ^*\mathrm{g} \end{array}$$

If we want to see the size of the resulting array, then we call this, gives us the size of each dimension h.shape()

[2, 2, 2]

We can restrict an array in python f[1,:] - We restrict to dimension 1, and all of the values are considered. The next three lines are equivalent slc = [slice(none)] * 2 slc[0] = 1 f[slc]