PCA Loadings Comparison on USArrests Dataset

Feature	Custom PCA Loadings	Loadings princomp
Murder	-0.536, -0.418, 0.341, 0.649	+0.536, +0.418, +0.341, +0.649
Assault	-0.583, -0.188, 0.268, -0.743	+0.583, +0.188, +0.268, -0.743
UrbanPop	-0.278, +0.873, 0.378, 0.134	+0.278, -0.873, +0.378, +0.134
Rape	-0.543, +0.167, -0.818, 0.089	+0.543, -0.167, -0.818, -

Magnitude of values is same

Signs are flipped for some columns This is acceptable in PCA because eigenvectors are defined up to a sign.

Variance explained is equal:
 Built-in PRINCOMP() shows 25% variance per component (since SS loadings = 1 for all).