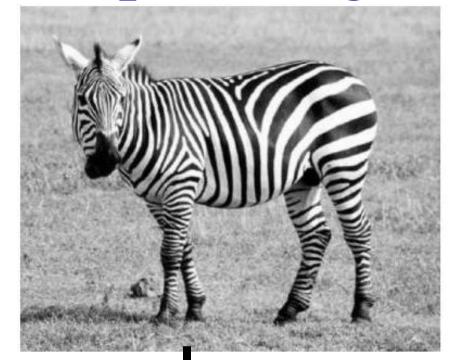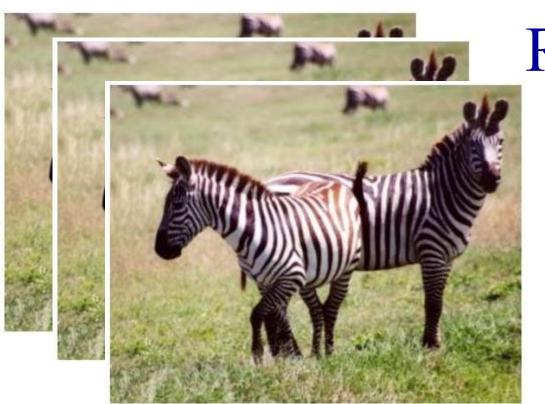Input image

Reference Images

Output image

Get color distribution prior

Predict *P (color | ref_prior, intensity)* for each pixel