1. Given $X_1, \ldots, X_n \sim Unif(0, \theta)$. Please run general likelihood ratio test with $H_0 : \theta = 1$ verse $H_1 : \theta \neq 1$.

2. We observe independent data $X \sim Bin(n_1, p_1)$, and $Y \sim Bin(n_2, p_2)$. Consider the hypothesis testing $H_0 : p_1 = p_2$ verse $H_1 : p_1 \neq p_2$. Please run general likelihood ratio test with $-2 \log \Lambda$.