MAT-150: Linear Algebra
EFY 8

Due: October 30, 2017

Problem Statement. Let $\beta = \{q_1, \ldots, q_n\}$ be a basis for R^n such that

$$S_j = \text{span}\{q_1, \ldots, q_j\}$$

is a $j-$dimensional invariant subspace under A, for $j = 1, \ldots, n$. Show that $[A]_\beta$ is an upper triangular matrix.