Exercises on derived equivalences

(1) Let A be a finite dimensional local algebra, for instance a bound quiver algebra $A = kQ/I$ with $|Q_0| = 1$. Determine all tilting complexes in $K^b(A\text{-proj})$ and all algebras B that are derived equivalent to A.

(2) In exercise (3)(c) on the problem sheet about computing extensions in homotopy or derived categories, several modules X have been determined that have no self-extensions. Which X are tilting complexes (as defined in 14.5)? Describe the derived equivalences defined by those X, by determining the images of indecomposable modules and irreducible morphisms.

(3) Let R and S be derived equivalent rings. Show that the opposite rings R^{op} and S^{op} are derived equivalent.