CIS 624 Assignment 4 Problem 1

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$T := \lambda xy.\ x$
$F := \lambda xy.\ y$
$IF := \lambda btf.\ b\ t\ f$
$AND := \lambda ab.\ IF\ a\ b\ F$
$PRED := \lambda nfx.\ n(\lambda g.\ \lambda h.\ h(g\ f))(\lambda u.\ x)(\lambda u.\ u)$
$SUB := \lambda mn.\ n\ PRED\ m$
$ISZERO := \lambda n.\ n(\lambda x.\ F)T$
$ISEQUAL := ADD(ISZERO(SUB\ a\ b)\ ISZERO(SUB\ b\ a))$