t17_amistd_1 (TMb-WtF5GZm1cqHEDKVzBTRtLurWwZXVWhwG)

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Let $v1\_setfam\_1 : \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1\_compos\_1 : \iota \Rightarrow \iota$ be given. Let $k1\_extpro\_1 : \iota \Rightarrow \iota$ be given. Let $v2\_extpro\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1\_relat\_1 : \iota \Rightarrow o$ be given. Let $v4\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $v5\_funct\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2\_memstr\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1\_partfun1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2\_extpro\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2\_memstr\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1\_extpro\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $l1\_extpro\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(\neg v1\_setfam\_1\ X0) \Rightarrow (\forall X1.((v1\_relat\_1\ X1) \wedge ((v4\_relat\_1\ X1\ (u1\_struct\_0\ (k1\_extpro\_1\ X0))) \wedge ((v1\_funct\_1\ X1) \wedge ((v5\_funct\_1\ X1\ (k2\_memstr\_0\ X0\ (k1\_extpro\_1\ X0))) \wedge (v1\_partfun1\ X1\ (u1\_struct\_0\ (k1\_extpro\_1\ X0)))))))) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (u1\_compos\_1\ (k1\_extpro\_1\ X0))) \Rightarrow (k2\_extpro\_1\ X0\ (k1\_extpro\_1\ X0)\ X2\ X1 = X1))) \tag{1}$$

Assume the following.

$$\forall X0.(\neg v1\_setfam\_1\ X0) \Rightarrow ((v2\_memstr\_0\ (k1\_extpro\_1\ X0)\ X0) \wedge (v1\_extpro\_1\ (k1\_extpro\_1\ X0)\ X0)) \tag{2}$$

Assume the following.

$$\forall X0.(\neg v1\_setfam\_1\ X0) \Rightarrow ((v1\_extpro\_1\ (k1\_extpro\_1\ X0)\ X0) \wedge (l1\_extpro\_1\ (k1\_extpro\_1\ X0)\ X0)) \tag{3}$$

Assume the following.

$$\forall X0.(\neg v1\_setfam\_1\ X0) \Rightarrow (\forall X1.((v2\_memstr\_0\ X1\ X0) \wedge (l1\_extpro\_1\ X1\ X0)) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (u1\_compos\_1\ X1)) \Rightarrow ((v2\_extpro\_1\ X2\ X0\ X1) \Leftrightarrow (\forall X3.((v1\_relat\_1\ X3) \wedge ((v4\_relat\_1\ X3\ (u1\_struct\_0\ X1)) \wedge ((v1\_funct\_1\ X3) \wedge ((v5\_funct\_1\ X3\ (k2\_memstr\_0\ X0\ X1)) \wedge (v1\_partfun1\ X3\ (u1\_struct\_0\ X1)))))) \Rightarrow (k2\_extpro\_1\ X0\ X1\ X2\ X3 = X3))))) \tag{4}$$

Theorem 1

$$\forall X0.(\neg v1\_setfam\_1\ X0) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (u1\_compos\_1\ (k1\_extpro\_1\ X0))) \Rightarrow (v2\_extpro\_1\ X1\ X0\ (k1\_extpro\_1\ X0)))$$