t44_memstr_0 (TMY3NBHX3QdVWtJC6kd6QUfbgKBE1UhBViT)

October 27, 2020

Let $v1\_setfam\_1 : \iota \Rightarrow o$ be given. Let $v2\_struct\_0 : \iota \Rightarrow o$ be given. Let $v2\_memstr\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v3\_memstr\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $l1\_memstr\_0 : \iota \Rightarrow \iota \Rightarrow o$ 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 $v5\_memstr\_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6\_numbers : \iota$ be given. Let $k8\_memstr\_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $k9\_xtuple\_0 : \iota \Rightarrow \iota$ be given. Let $k1\_funct\_4 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7\_memstr\_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5\_memstr\_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_xboole\_0 : \iota$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $v7\_ordinal1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(\neg v1\_setfam\_1\ X0) \Rightarrow (\forall X1.((\neg v2\_struct\_0\ X1) \wedge ((v2\_memstr\_0\ X1\ X0) \wedge ((v3\_memstr\_0\ X1\ X0) \wedge (l1\_memstr\_0\ X1\ X0)))) \Rightarrow (\forall X2.((v1\_relat\_1\ X2) \wedge ((v4\_relat\_1\ X2\ (u1\_struct\_0\ X1)) \wedge ((v1\_funct\_1\ X2) \wedge (v5\_funct\_1\ X2\ (k2\_memstr\_0\ X0\ X1))))) \Rightarrow ((k4\_struct\_0\ X1 \in k9\_xtuple\_0\ X2) \Rightarrow (k1\_funct\_4\ X2\ (k7\_memstr\_0\ X0\ X1\ (k5\_memstr\_0\ X0\ X1\ X2)) = X2))))) \tag{1}$$

Assume the following.

$$k6\_numbers = k1\_xboole\_0 \tag{2}$$

Assume the following.

$$v1\_xboole\_0\ k1\_xboole\_0 \tag{3}$$

Assume the following.

$$\forall X0.(\neg v1\_setfam\_1\ X0) \Rightarrow (\forall X1.((\neg v2\_struct\_0\ X1) \wedge ((v2\_memstr\_0\ X1\ X0) \wedge ((v3\_memstr\_0\ X1\ X0) \wedge (l1\_memstr\_0\ X1\ X0)))) \Rightarrow (\forall X2.((v1\_relat\_1\ X2) \wedge ((v4\_relat\_1\ X2\ (u1\_struct\_0\ X1)) \wedge ((v1\_funct\_1\ X2) \wedge (v5\_funct\_1\ X2\ (k2\_memstr\_0\ X0\ X1))))) \Rightarrow (k8\_memstr\_0\ X0\ X1\ X2 = k1\_funct\_4\ X2\ (k7\_memstr\_0\ X0\ X1\ k6\_numbers)))) \tag{4}$$

Assume the following.

$$\forall X0.(\neg v1\_setfam\_1\ X0)\Rightarrow(\forall X1.((\neg v2\_struct\_0\ X1)\wedge ((v2\_memstr\_0\ X1\ X0)\wedge((v3\_memstr\_0\ X1\ X0)\wedge(l1\_memstr\_0\ X1\ X0))))\Rightarrow (\forall X2.(v7\_ordinal1\ X2)\Rightarrow(\forall X3.((v1\_relat\_1\ X3)\wedge((v4\_relat\_1\ X3\ (u1\_struct\_0\ X1))\wedge((v1\_funct\_1\ X3)\wedge(v5\_funct\_1\ X3\ (k2\_memstr\_0\ X0\ X1)))))\Rightarrow((v5\_memstr\_0\ X3\ X0\ X1\ X2)\Leftrightarrow((k4\_struct\_0\ X1\in k9\_xtuple\_0\ X3)\wedge(k5\_memstr\_0\ X0\ X1\ X3=X2))))))) \tag{5}$$

Assume the following.

$$\forall X0.(v1\_xboole\_0\ X0)\Rightarrow(v7\_ordinal1\ X0) \tag{6}$$

Theorem 1

$$\forall X0.(\neg v1\_setfam\_1\ X0)\Rightarrow(\forall X1.((\neg v2\_struct\_0\ X1)\wedge ((v2\_memstr\_0\ X1\ X0)\wedge((v3\_memstr\_0\ X1\ X0)\wedge(l1\_memstr\_0\ X1\ X0))))\Rightarrow (\forall X2.((v1\_relat\_1\ X2)\wedge((v4\_relat\_1\ X2\ (u1\_struct\_0\ X1))\wedge ((v1\_funct\_1\ X2)\wedge((v5\_funct\_1\ X2\ (k2\_memstr\_0\ X0\ X1))\wedge(v5\_memstr\_0\ X2\ X0\ X1\ k6\_numbers)))))\Rightarrow(k8\_memstr\_0\ X0\ X1\ X2=X2)))$$