

Answer of Question 2.8.a

Group 2/04

Using the assumption of ontology description mentioned in question 2.6.b:

Sibling \equiv Individual $\sqcap \exists \text{childOf.}(\text{Family} \sqcap >1 \text{ parentOf.Individual})$

Brother \equiv Sibling \sqcap Male

Sister \equiv Sibling \sqcap Female

Uncle \equiv Brother $\sqcap \exists \text{childOf.Sibling}$

Aunt \equiv Sister $\sqcap \exists \text{childOf.Sibling}$

Grandparent \equiv Individual $\sqcap \exists \text{parentOf.Parent}$

Grandfather \equiv Grandparent \sqcap Male

Grandmother \equiv Grandparent \sqcap Female

Grandchild \equiv *Grandparent*⁻

Grandson \equiv Grandchild \sqcap Male

Granddaughter \equiv Grandchild \sqcap Female