1) Given an ontology O which consists of the following two axioms

-ClassAssertion(ex:Resident ex:Elise)
-ClassAssertion(ex:Suite ex:Suite-No-5)
-SubClassOf(ex:Resident ex:Person)
-ObjectPropertyAssertion(ex:inhabits ex:Elise ex:Suite-No-5)

Write down an interpretation that satisfies O (is a model of O)

Vocabulary V (3pts)

\[ V = \{ \text{Elise, Suite-No-5, Resident, Person, Suite, inhabits} \} \]

Comment: Elise and Suite-No-5 are Individual Names; Resident, Person, Suite are Class Names; inhabits is a Property Name.

Domain D (1pt)

\[ D = \{ a, b \} \]

Interpretation function \( \cdot \) (6pts)

- \( \text{Elise}^\cdot = a \)
- \( \text{Suite-No-5}^\cdot = b \)
- \( \text{Resident}^\cdot = \{ a \} \)
- \( \text{Person}^\cdot = \{ a \} \)
- \( \text{Suite}^\cdot = \{ b \} \)
- \( \text{inhabits}^\cdot = \{ (a,b) \} \)