

Simple interpretations

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:Bart :hasSister :Maggie  
:hasSister :range :Woman  
:hasSister :domain :Person  
:Woman :subClassOf :Person
```

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$\Delta^{\mathcal{I}} = \{b, m\}$
: Bart ^{\mathcal{I}} = b
: Maggie ^{\mathcal{I}} = m
: Woman ^{\mathcal{I}} = $\{m\}$
: Person ^{\mathcal{I}} = $\{b, m\}$
: hasSister ^{\mathcal{I}} = $\{(b, m)\}$

Full interpretations (INF4580)

V	Set of all URIs in our knowledge base
IR	Set of all resources in the model/interpretation
IP	Set of all properties in the model (usually a subset of IR)
I_s	Mapping from URIs to resources (more or less the same as $\cdot^{\mathcal{I}}$ in the simple interpretation)
I_{EXT}	Mapping from each property to its definition (set of pairs)
I_{CEXT}	Mapping from each class to its members.

Full interpretations (INF4580)

:Bart :hasSister :Maggie
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$$IR = \{b, m, W, P, hs, do, ra, su\}$$

$$IP = \{hs, do, ra, su\}$$

$$I_s(: \text{Bart}) = b$$

$$I_s(: \text{Maggie}) = m$$

$$I_s(: \text{hasSister}) = hs$$

$$I_s(: \text{Woman}) = W$$

$$I_s(: \text{Person}) = P$$

$$I_s(: \text{range}) = ra$$

$$I_s(: \text{domain}) = do$$

$$I_s(: \text{subClassOf}) = su$$

$$I_{EXT}(hs) = \{\langle b, m \rangle\}$$

$$I_{EXT}(ra) = \{\langle hs, W \rangle\}$$

$$I_{EXT}(do) = \{\langle hs, P \rangle\}$$

$$I_{EXT}(su) = \{\langle W, P \rangle\}$$

$$I_{CEXT}(W) = \{m\}$$

$$I_{CEXT}(P) = \{b, m\}$$