Deskreptive Programmierung

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SS 15

Blatt 9

Aufgabe 43

- Herbrand-Universum (H_U) := `{frankfurt, san_francisco, chicago, honolulu, maui}`
- Herbrand-Basis (H_B) := `{connection(x,y) | x,y` $\in H_U$ `}` $\cup$ `{direct(x,y) | x,y` $\in H_U$ `}`
- Kleinstes Herbrand-Modell := `{connection(x,y) | (x,y)` $\in A$ `}` $\cup$ `{direct(x,y) | (x,y)` $\in A_{direkt}$ `}`
  - A_{direkt} := `{(frankfurt, san_francisco), (frankfurt, chicago), (san_francisco, honolulu), (honolulu, maui)}`
  - $A_{indirekt}$:= `{(frankfurt, honolulu), (frankfurt, maui), (san_francisco, maui)}`
  - $A := A_{direkt} \cup A_{indirekt}$

Aufgabe 44

$$T_P(\emptyset) = \{female(juliet), female(petra), parent(juliet, petra), parent(juliet, paul)$$
$$parent(petra, harry), parent(harry, luke), parent(luke, tom)\}$$
$$T_P(T_P(\emptyset)) = T_P(\emptyset) \cup \{sister(petra, paul), grandmother(juliet, harry), grandmother(petra, luke)\}$$
$$T_P(T_P(T_P(\emptyset))) = T_P(T_P(\emptyset)) \cup \{aunt(petra, harry), ancestor(juliet, harry), ancestor(petra, luke)\}$$

Aufgabe 45