BLATT 8

DANIEL SCHMIDT & PAMELA FLEISCHMANN

Aufgabe 1. connect to UEBUNG;

CREATE VIEW family (X,Y) **AS**
WITH MOTHERANCESTRY(Ancestor, Descendant) **AS**
        ((**SELECT** Mother, Child **FROM** MOTHERHOOD) **UNION ALL**
              (**SELECT** x.Mother, y.Descendant
                    FROM MOTHERHOOD x, MOTHERANCESTRY y
                    WHERE x.Child = y.Ancestor)),
      FATHERANCESTRY(Ancestor, Descendant) **AS**
      ((**SELECT** Father, Child **FROM** FATHERHOOD) **UNION ALL**
            (**SELECT** x.Father, y.Descendant
                 FROM FATHERHOOD x, FATHERANCESTRY y
                 WHERE x.Child = y.Ancestor)),
      ANCESTRY(X,Y) **AS**
      ((**SELECT** Ancestor, Descendant **FROM** MOTHERANCESTRY) **UNION**
      (**SELECT** Descendant, Ancestor **FROM** MOTHERANCESTRY) **UNION**
      (**SELECT** Ancestor, Descendant **FROM** FATHERANCESTRY) **UNION**
      (**SELECT** Descendant, Ancestor **FROM** FATHERANCESTRY)),
      COMMONANCESTRY(X,Y) **AS**
      (**SELECT DISTINCT** a.X,b.X **FROM** ANCESTRY a, ANCESTRY b
            WHERE a.Y = b.Y),
      COMMONANDMARRIAGE(X,Y) **AS**
          ((**SELECT** ∗ **FROM** COMMONANCESTRY) **UNION**
                (**SELECT** MAN, WOMAN **FROM** married) **UNION**
                (**SELECT** WOMAN, MAN **FROM** married)),
      RELATED(X, Y) **AS**
      (**SELECT DISTINCT** a.X, b.X
          FROM COMMONANDMARRIAGE a, COMMONANDMARRIAGE b
          WHERE a.Y = b.Y)
      (**SELECT** ∗ **FROM** RELATED);

terminate;

Die enstprechende Anfrage zu "Wieviele Verwandte hat Franziska?"
ist SELECT COUNT(Y) FROM family WHERE X='Franziska'; mit dem
Resultat 28.

Aufgabe 2.

Aufgabe 3.