Hochschule München, Fakultät 07, SoSe 2016

Datenbanken 2

Dokumentation zu Übung 3

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Aufgabe 2

```
-------------------------------------------------------------
--  DDL for Function MIN_MAX_SCALE
-------------------------------------------------------------

  CREATE OR REPLACE FUNCTION "MIN_MAX_SCALE"
  (min_old NUMBER, min_new NUMBER, max_old NUMBER, max_new
     NUMBER, v NUMBER)
RETURN NUMBER
IS
BEGIN
  RETURN (((v - min_old)/(max_old - min_old))*(max_new -
     min_new)) + min_new;
END;

/
```

```
-------------------------------------------------------------
--  DDL for Procedure MIN_MAX_CALCULATOR
-------------------------------------------------------------
-- Ergebnisse werden in neue Table eingetragen
  CREATE OR REPLACE PROCEDURE "MIN_MAX_CALCULATOR"
  (min_new NUMBER, max_new NUMBER)
IS
min_old number;
BEGIN
 SELECT MIN(ZAHLEN) INTO min_old FROM NUMBERS;
  INSERT INTO NUMBERS_RESULT(
  SELECT MIN_MAX_SCALE(min_old, min_new, (SELECT MAX(ZAHLEN)
     FROM NUMBERS), max_new, ZAHLEN)
  FROM NUMBERS);
END;

/
```

```
-- Alternative: Update in gleicher Table
CREATE OR REPLACE PROCEDURE "MIN_MAX_CALCULATOR"
  (min_new NUMBER, max_new NUMBER)
IS
min_old number;
BEGIN
 SELECT MIN(ZAHLEN) INTO min_old FROM NUMBERS;
```

```
    UPDATE NUMBERS SET ZAHLEN = MIN_MAX_SCALE(min_old, min_new, (
        SELECT MAX(ZAHLEN) FROM NUMBERS), max_new, ZAHLEN);
END;
```

```
--> Result:
EXECUTE min_max_calculator(0,10);

SELECT * FROM NUMBERS ORDER BY ZAHLEN ASC;
```

ZAHLEN
5
10
20
25
42
50
53
100
120
142
242
250
342
350
420

Aufgabe 3

```
--------------------------------------------------------
--  DDL for Table ANGESTELLTE
--------------------------------------------------------
    CREATE TABLE "ANGESTELLTE" (
          "A_NR" NUMBER(*,0),
          "A_NAME" VARCHAR2(50 BYTE),
          "A_GEBURTSDATUM" DATE,
          "A_BERUFSBEZEICHNUNG" VARCHAR2(60 BYTE),
          "A_MONATSGEHALT" NUMBER(*,0),
          "A_GESCHLECHT" VARCHAR2(10 BYTE),
         PRIMARY KEY ("A_NR"));
```

```
--------------------------------------------------------
--  DDL for Table ARBEITER
--------------------------------------------------------
```

```
CREATE TABLE "ARBEITER" (
        "A_NAME" VARCHAR2(30 BYTE),
        "A_VORNAME" VARCHAR2(30 BYTE),
        "A_GEBURTSMONAT" VARCHAR2(5 BYTE),
        "A_STUNDENLOHN" NUMBER(*,0),
        PRIMARY KEY ("A_NAME", "A_VORNAME"));
```

```
--------------------------------------------------------
--  DDL for Table BERUFE
--------------------------------------------------------

CREATE TABLE "BERUFE" (
        "B_CODE" NUMBER(*,0),
        "B_TYPE" VARCHAR2(30 BYTE),
        PRIMARY KEY ("B_CODE"));
```

```
--------------------------------------------------------
--  DDL for Table GESCHLECHTER
--------------------------------------------------------

CREATE TABLE "GESCHLECHTER" (
        "G_CODE" NUMBER(*,0),
        "G_TYPE" VARCHAR2(10 BYTE),
        PRIMARY KEY ("G_CODE"));
```

```
--------------------------------------------------------
--  DDL for Table PERSONAL
--------------------------------------------------------

CREATE TABLE "PERSONAL" (
        "P_NR" NUMBER(*,0),
        "P_NAME" VARCHAR2(30 BYTE),
        "P_VORNAME" VARCHAR2(30 BYTE),
        "P_ALTER" NUMBER(*,0),
        "P_GESCHLECHT" NUMBER(*,0),
        "P_BERUFSCODE" NUMBER(*,0),
        "P_JAHRESEINKOMMEN" NUMBER(*,0),
        PRIMARY KEY ("P_NR"),
        FOREIGN KEY ("P_GESCHLECHT") REFERENCES "GESCHLECHTER"
            ("G_CODE"),
        FOREIGN KEY ("P_BERUFSCODE") REFERENCES "BERUFE" (
            "B_CODE"));
```

```
--------------------------------------------------------
--  DDL for Table ZUORDNUNG
--------------------------------------------------------
```

```
CREATE TABLE "ZUORDNUNG" (
        "Z_NR" NUMBER(*,0),
        "Z_TABLE_OLD" VARCHAR2(30 BYTE),
        "Z_KEY_OLD" VARCHAR2(60 BYTE),
        PRIMARY KEY ("Z_NR"),
        FOREIGN KEY ("Z_NR") REFERENCES "PERSONAL" ("P_NR"));
```

```
--------------------------------------------------------
--  INSERTS for Table GESCHLECHTER
--------------------------------------------------------
Insert into GESCHLECHTER (G_CODE,G_TYPE) values ('0','unbekannt
    ');
Insert into GESCHLECHTER (G_CODE,G_TYPE) values ('1','weiblich'
    );
Insert into GESCHLECHTER (G_CODE,G_TYPE) values ('2','maennlich
    ');
```