load_sample.sql

```
The source code for the load_sample.sql is:
REM Create the REGIONS table to hold region information for locations
REM HR.LOCATIONS table has a foreign key to this table.
CREATE TABLE regions
   ( region_id NUMBER
CONSTRAINT region_id_nn NOT NULL
    region_name VARCHAR2(25)
CREATE UNIQUE INDEX reg_id_pk
          ON regions (region_id);
ALTER TABLE regions
   ADD ( CONSTRAINT reg_id_pk
PRIMARY KEY (region_id)
\label{lem:reaction} \textit{REM Create the COUNTRIES table to hold country information for customers}
REM and company locations.
REM OE.CUSTOMERS table and HR.LOCATIONS have a foreign key to this table.
CREATE TABLE countries
   ( country_id CHAR(2)
CONSTRAINT country_id_nn NOT NULL
   , country_name VARCHAR2(40)
, region_id NUMBER
, CONSTRAINT country_c_id_pk
   PRIMARY KEY (country_id)
   ORGANIZATION INDEX;
ALTER TABLE countries
   ADD ( CONSTRAINT countr_reg_fk FOREIGN KEY (region_id)
   REFERENCES regions(region_id)
REM Create the LOCATIONS table to hold address information for company departments. REM HR.DEPARTMENTS has a foreign key to this table.
CREATE TABLE locations
   ( location_id NUMBER(4)
, street_address VARCHAR2(40)
, postal_code VARCHAR2(12)
     city VARCHAR2(30)
   CONSTRAINT loc_city_nn NOT NULL
, state_province VARCHAR2(25)
     country_id CHAR(2)
   );
CREATE UNIQUE INDEX loc_id_pk
ON locations (location_id);
ALTER TABLE locations
   ADD ( CONSTRAINT loc_id_pk
PRIMARY KEY (location_id)
, CONSTRAINT loc_c_id_fk
   FOREIGN KEY (country_id)
   REFERENCES countries(country id)
Rem Useful for any subsequent addition of rows to locations table
Rem Starts with 3300
CREATE SEQUENCE locations_seq START WITH 3300
   INCREMENT BY 100
   MAXVALUE 9900
   NOCACHE
   NOCYCLE;
REM Create the DEPARTMENTS table to hold company department information. REM HR.EMPLOYEES and HR.JOB_HISTORY have a foreign key to this table.
CREATE TABLE departments
   ( department_id NUMBER(4)
     department name VARCHAR2(30)
   CONSTRAINT dept_name_nn NOT NULL
   , manager_id NUMBER(6)
, location_id NUMBER(4)
CREATE UNIQUE INDEX dept_id_pk
          ON departments (department_id);
ALTER TABLE departments
ADD ( CONSTRAINT dept_id_pk
PRIMARY KEY (department_id)
   , CONSTRAINT dept_loc_fk
FOREIGN KEY (location_id)
REFERENCES locations (location_id)
```

```
\ensuremath{\mathsf{Rem}} Useful for any subsequent addition of rows to departments table \ensuremath{\mathsf{Rem}} Starts with 280
CREATE SEQUENCE departments_seq
    START WITH 280
    INCREMENT BY 10
    MAXVALUE 9990
    NOCACHE
    NOCYCLE;
REM Create the JOBS table to hold the different names of job roles within the company.
REM HR.EMPLOYEES has a foreign key to this table.
CREATE TABLE jobs
( job_id VARCHAR2(10)
       job_title VARCHAR2(35)
    CONSTRAINT job_title_nn NOT NULL
    , min_salary NUMBER(6)
, max_salary NUMBER(6)
);
CREATE UNIQUE INDEX job_id_pk
             ON jobs (job_id);
ALTER TABLE jobs

ADD ( CONSTRAINT job_id_pk
PRIMARY KEY(job_id)
    );
REM ******
REM Create the EMPLOYEES table to hold the employee personnel
REM information for the company.
REM HR.EMPLOYEES has a self referencing foreign key to this table.
CREATE TABLE employees
    ( employee_id NUMBER(6)
       first_name VARCHAR2(20)
last_name VARCHAR2(25)
    CONSTRAINT emp_last_name_nn NOT NULL
    , email VARCHAR2(25)
CONSTRAINT emp_email_nn NOT NULL
, phone_number VARCHAR2(20)
    , hire_date DATE
CONSTRAINT emp_hire_date_nn NOT NULL
, job_id VARCHAR2(10)
    CONSTRAINT emp_job_nn NOT NULL
, salary NUMBER(8,2)
, commission_pct NUMBER(2,2)
       manager_id NUMBER(6)
department_id NUMBER(4)
CONSTRAINT emp_salary_min
    CHECK (salary > 0)
, CONSTRAINT emp_email_uk
    UNIQUE (email)
    ) ;
CREATE UNIQUE INDEX emp_emp_id_pk
ON employees (employee_id) ;
ALTER TABLE employees
    ADD ( CONSTRAINT emp_emp_id_pk
PRIMARY KEY (employee_id)
, CONSTRAINT emp_dept_fk
    , CONSTRAINT emp_dept_TK
FOREIGN KEY (department_id)
REFERENCES departments
, CONSTRAINT emp_job_fk
FOREIGN KEY (job_id)
REFERENCES jobs (job_id)
, CONSTRAINT emp_manager_fk
    FOREIGN KEY (manager_id)
REFERENCES employees
    );
ALTER TABLE departments
    ADD ( CONSTRAINT dept_mgr_fk
FOREIGN KEY (manager_id)
REFERENCES employees (employee_id)
\ensuremath{\mathsf{Rem}} Useful for any subsequent addition of rows to employees table \ensuremath{\mathsf{REM}} Starts with 207
CREATE SEQUENCE employees_seq
    START WITH 207
    INCREMENT BY 1
    NOCACHE
    NOCYCLE:
REM Create the JOB_HISTORY table to hold the history of jobs that
REM employees have held in the past.
REM HR.JOBS, HR_DEPARTMENTS, and HR.EMPLOYEES have a foreign key to this table.
CREATE TABLE job_history
( employee_id NUMBER(6)
CONSTRAINT jhist_employee_nn NOT NULL
       start_date DATE
    CONSTRAINT jhist_start_date_nn NOT NULL
       end_date DATE
```

```
CONSTRAINT jhist_end_date_nn NOT NULL
, job_id VARCHAR2(10)
CONSTRAINT jhist_job_nn NOT NULL
, department_id NUMBER(4)
, CONSTRAINT jhist_date_interval
CHECK (end_date > start_date)
{\tt CREATE~UNIQUE~INDEX~jhist\_emp\_id\_st\_date\_pk}
             ON job_history (employee_id, start_date);
ALTER TABLE job_history

ADD ( CONSTRAINT jhist_emp_id_st_date_pk
PRIMARY KEY (employee_id, start_date)
, CONSTRAINT jhist_job_fk
FOREIGN KEY (job_id)
PREFERENCES jobs
    REFERENCES jobs
, CONSTRAINT jhist_emp_fk
FOREIGN KEY (employee_id)
    REFERENCES employees
, CONSTRAINT jhist_dept_fk
FOREIGN KEY (department_id)
    REFERENCES departments
    );
REM Create the EMP_DETAILS_VIEW that joins the employees, jobs,
REM departments, jobs, countries, and locations table to provide details
REM about employees.
CREATE OR REPLACE VIEW emp_details_view
    (employee_id,
    job_id,
manager_id,
department_id,
    location_id,
    country id.
     first_name,
    last_name,
    salary,
commission_pct,
    department_name,
job_title,
    city,
state_province,
    country_name, region_name)
AS SELECT
    e.employee_id,
    e.job_id,
    e.manager_id,
    e.department id.
    d.location_id,
    1.country_id,
    e.first name.
    e.last_name,
    e.salary,
e.commission_pct,
    d.department_name,
    j.job_title,
l.city,
l.state_province,
    c.country_name,
     r.region_name
    FROM
     employees e,
    departments d
    jobs j,
locations l,
    countries c,
    regions r
     WHERE e.department_id = d.department_id
    AND d.location_id = 1.location_id
AND 1.country_id = c.country_id
AND c.region_id = r.region_id
    AND j.job_id = e.job_id WITH READ ONLY;
COMMIT;
ALTER SESSION SET NLS_LANGUAGE=American;
REM **********************************insert data into the REGIONS table
INSERT INTO regions VALUES
    ( 1
, 'Europe'
INSERT INTO regions VALUES
    ( 2
, 'Americas'
INSERT INTO regions VALUES
    SEK.
(3
'Asia'
INSERT INTO regions VALUES
    (4
       'Middle East and Africa'
```

```
INSERT INTO countries VALUES
  ( 'IT'
  , 'Italy'
   , 1
);
INSERT INTO countries VALUES
   ( 'JP'
, 'Japan'
, 3
);
INSERT INTO countries VALUES
   ( 'US'
, 'United States of America'
, 2
);
INSERT INTO countries VALUES
  ( 'CA'
  , 'Canada'
  , 2
  );
INSERT INTO countries VALUES
   ( 'CN'
, 'China'
   , 3
);
INSERT INTO countries VALUES
   ( 'IN'
, 'India'
, 3
);
INSERT INTO countries VALUES
   ( 'AU'
, 'Australia'
, 3
);
INSERT INTO countries VALUES
   ( 'ZW'
, 'Zimbabwe'
, 4
);
INSERT INTO countries VALUES
   ( 'SG'
, 'Singapore'
, 3
INSERT INTO countries VALUES
   ( 'UK'
, 'United Kingdom'
, 1
);
INSERT INTO countries VALUES
  ( 'FR'
  , 'France'
   , 1
  );
INSERT INTO countries VALUES
   ( 'DE'
, 'Germany'
, 1
);
INSERT INTO countries VALUES
  ( 'ZM'
  , 'Zambia'
  , 4
  );
INSERT INTO countries VALUES
  ( 'EG'
  , 'Egypt'
  , 4
  );
INSERT INTO countries VALUES
   () 'BR'
( 'BR'
, 'Brazil'
, 2
);
INSERT INTO countries VALUES
   ( 'CH'
, 'Switzerland'
, 1
);
INSERT INTO countries VALUES
  ( 'NL'
  , 'Netherlands'
  , 1
  );
INSERT INTO countries VALUES
```

```
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        , 'Mexico'
, 2
);
    INSERT INTO countries VALUES
       ( 'KW'
, 'Kuwait'
, 4
   INSERT INTO countries VALUES
  ( 'IL'
  , 'Israel'
  , 4
  );
    INSERT INTO countries VALUES
        ( 'DK'
, 'Denmark'
, 1
);
    INSERT INTO countries VALUES
        ( 'HK'
, 'HongKong'
, 3
   INSERT INTO countries VALUES
  ( 'NG'
  , 'Nigeria'
  , 4
  );
    INSERT INTO countries VALUES
       SERT INTO coun
( 'AR'
, 'Argentina'
, 2
);
    INSERT INTO countries VALUES
       ( 'BE'
, 'Belgium'
, 1
);
    REM ****************************insert data into the LOCATIONS table
    INSERT INTO locations VALUES
        ( 1000
       ( 1000
, '1297 Via Cola di Rie'
, '00989'
, 'Roma'
, NULL
, 'IT'
    INSERT INTO locations VALUES
        ( 1100
        , '93091 Calle della Testa'
, '10934'
, 'Venice'
        , NULL
, 'IT'
    INSERT INTO locations VALUES
        ( 1200

, '2017 Shinjuku-ku'

, '1689'

, 'Tokyo'

, 'Tokyo Prefecture'

, 'JP'
   INSERT INTO locations VALUES ( 1300
        , '9450 Kamiya-cho'
, '6823'
, 'Hiroshima'
       , 'JP'
);
    INSERT INTO locations VALUES
        ( 1400
        ( 1400
, '2014 Jabberwocky Rd'
, '26192'
, 'Southlake'
, 'Texas'
, 'US'
);
    INSERT INTO locations VALUES
        ( 1500
       ( 1500 ), '2011 Interiors Blvd'
, '99236'
, 'South San Francisco'
, 'California'
, 'US'
);
    INSERT INTO locations VALUES
        ( 1600
, '2007 Zagora St'
```

```
, '50090'
       'South Brunswick'
   , 'New Jersey'
, 'US'
    ,
);
INSERT INTO locations VALUES
   ( 1700
   , '2004 Charade Rd'
, '98199'
    , 'Seattle'
   , 'Washington'
, 'US'
INSERT INTO locations VALUES
   ( 1800
, '147 Spadina Ave'
, 'M5V 2L7'
   , 'Toronto'
, 'Ontario'
, 'CA'
{\tt INSERT\ INTO\ locations\ VALUES}
   ( 1900
    , '6092 Boxwood St'
, 'YSW 9T2'
, 'Whitehorse'
   , 'Yukon'
, 'CA'
INSERT INTO locations VALUES
   ( 2000
   ( 2000
, '40-5-12 Laogianggen'
, '190518'
, 'Beijing'
, NULL
   , 'CN'
);
INSERT INTO locations VALUES
   ( 2100
, '1298 Vileparle (E)'
    , '490231'
      'Bombay'
'Maharashtra'
'IN'
INSERT INTO locations VALUES
   SERI INIO locations VALUES
( 2200
, '12-98 Victoria Street'
, '2901'
, 'Sydney'
, 'New South Wales'
, 'AU'
);
INSERT INTO locations VALUES
   ( 2300
, '198 Clementi North'
, '540198'
, 'Singapore'
, NULL
   , 'SG'
);
   ( 2400
, '8204 Arthur St'
, NULL
INSERT INTO locations VALUES
   , 'London'
   , 'UK'
);
INSERT INTO locations VALUES
   ( 2500
, 'Magdalen Centre, The Oxford Science Park'
       'Oxford'
       'Oxford'
'UK'
   ,
);
INSERT INTO locations VALUES
   ( 2600
, '9702 Chester Road'
       '09629850293'
'Stretford'
       'Manchester'
       'UK'
   , '
);
INSERT INTO locations VALUES
   ( 2700
       'Schwanthalerstr. 7031'
       '80925'
'Munich'
       'Bavaria'
       'DE'
    ,
);
```

```
INSERT INTO locations VALUES
   ( 2800
     'Rua Frei Caneca 1360 '
     '01307-002'
     'Sao Paulo'
   , 'Sao Paulo'
, 'BR'
   ,
);
INSERT INTO locations VALUES
   ( 2900
    '20 Rue des Corps-Saints'
   , 'Geneva'
  , 'Geneve'
, 'CH'
INSERT INTO locations VALUES
  , 'Murtenstrasse 921'
   ( 3000
  , 'Bern'
, 'BE'
, 'CH'
INSERT INTO locations VALUES
  ( 3100
, 'Pieter Breughelstraat 837'
, '3029SK'
, 'Utrecht'
   , 'Utrecht'
INSERT INTO locations VALUES
  ( 3200
     'Mariano Escobedo 9991'
     'Mexico City'
     'Distrito Federal,'
     'MX'
REM disable integrity constraint to EMPLOYEES to load data
ALTER TABLE departments
  DISABLE CONSTRAINT dept_mgr_fk;
INSERT INTO departments VALUES
  ( 10
   , 'Administration'
   , 200
  , 1700
);
INSERT INTO departments VALUES
  ( 20
, 'Marketing'
, 201
    1800
   );
   {\tt INSERT\ INTO\ departments\ VALUES}
  ( 30 , 'Purchasing'
   , 114
  , 1700
);
   INSERT INTO departments VALUES
  , 'Human Resources'
   , 2400
   );
INSERT INTO departments VALUES
  ( 50
, 'Shipping'
, 121
  , 1500
);
   INSERT INTO departments VALUES
  ( 60
, 'IT'
, 103
  , 1400
);
   INSERT INTO departments VALUES
  ( 70
, 'Public Relations'
   , 204
  ∠04
, 2700
);
   INSERT INTO departments VALUES
   ( 80
, 'Sales'
```

```
, 145
, 2500
);
   INSERT INTO departments VALUES
   , 'Executive'
   , 1700
);
INSERT INTO departments VALUES
   ( 100
, 'Finance'
, 108
   , 1700
);
   INSERT INTO departments VALUES
   ( 110 , 'Accounting'
   , 205
  , 1700
);
INSERT INTO departments VALUES
   ( 120
, 'Treasury'
, NULL
   , 1700
);
   ( 130
, 'Corporate Tax'
, NULL
INSERT INTO departments VALUES
   , 1700
);
   ( 140
, 'Control And Credit'
, NULL
INSERT INTO departments VALUES
  , 1700
);
INSERT INTO departments VALUES
   ( 150
, 'Shareholder Services'
, NULL
   , 1700
);
INSERT INTO departments VALUES
   ( 160
   , 'Benefits'
   , 1700
);
INSERT INTO departments VALUES
   ( 170
, 'Manufacturing'
   , NULL
   , 1700
);
INSERT INTO departments VALUES
  ( 180
, 'Construction'
, NULL
   , 1700
);
INSERT INTO departments VALUES
   ( 190
   , 'Contracting'
, NULL
, 1700
INSERT INTO departments VALUES
   ( 200
, 'Operations'
, NULL
   , 1700
);
INSERT INTO departments VALUES
   ( 210
, 'IT Support'
, NULL
   , 1700
);
INSERT INTO departments VALUES
   ( 220
, 'NOC'
   , NULL
   , 1700
);
INSERT INTO departments VALUES
   ( 230
, 'IT Helpdesk'
, NULL
```

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       , 1700
);
   INSERT INTO departments VALUES
       ( 240
        , 'Government Sales'
        , NULL
       , 1700
);
   INSERT INTO departments VALUES
       ( 250
, 'Retail Sales'
        , NULL
       , 1700
);
   INSERT INTO departments VALUES
       ( 260
, 'Recruiting'
, NULL
       , 1700
);
   INSERT INTO departments VALUES
       ( 270
       , 'Payroll'
       , 1700
);
   REM ********************************insert data into the JOBS table
   INSERT INTO jobs VALUES
( 'AD_PRES'
, 'President'
, 20000
          40000
        INSERT INTO jobs VALUES
       ( 'AD_VP'
, 'Administration Vice President'
        , 15000
          30000
        );
   INSERT INTO jobs VALUES
       ( 'AD_ASST'
, 'Administration Assistant'
, 3000
          6000
       );
   INSERT INTO jobs VALUES
  ( 'FI_MGR'
  , 'Finance Manager'
        , 8200
      , 16000
);
   INSERT INTO jobs VALUES
  ( 'FI_ACCOUNT'
  , 'Accountant'
       , 4200
, 9000
);
   INSERT INTO jobs VALUES
       ( 'AC_MGR'
, 'Accounting Manager'
, 8200
       , 16000
);
   INSERT INTO jobs VALUES
  ( 'AC_ACCOUNT'
   , 'Public Accountant'
        , 4200
          9000
        INSERT INTO jobs VALUES
       ( 'SA_MAN'
, 'Sales Manager'
        , 10000
         , 20000
   INSERT INTO jobs VALUES
  ( 'SA_REP'
  , 'Sales Representative'
  , 6000
       , 12000
);
   INSERT INTO jobs VALUES
( 'PU_MAN'
, 'Purchasing Manager'
```

, 8000 , 15000);

INSERT INTO jobs VALUES ('PU_CLERK' , 'Purchasing Clerk' , 2500

```
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         5500
       );
   INSERT INTO jobs VALUES
( 'ST_MAN'
, 'Stock Manager'
        , 5500
       , 5500
, 8500
);
INSERT INTO jobs VALUES
( 'ST_CLERK'
, 'Stock Clerk'
      ∠000
, 5000
);
        , 2000
   INSERT INTO jobs VALUES
( 'SH_CLERK'
, 'Shipping Clerk'
       , 2500
       , 5500
);
   INSERT INTO jobs VALUES
       ('IT_PROG', 'Programmer', 4000
      4000
, 10000
);
   INSERT INTO jobs VALUES
  ( 'MK_MAN'
  , 'Marketing Manager'
       , 9000
      , 15000
);
   INSERT INTO jobs VALUES
  ( 'MK_REP'
  , 'Marketing Representative'
       , 4000
          9000
       );
   INSERT INTO jobs VALUES
( 'HR_REP'
, 'Human Resources Representative'
       , 4000
       , 9000
);
   INSERT INTO jobs VALUES
  ( 'PR_REP'
  , 'Public Relations Representative'
      4500
, 10500
);
       , 4500
   INSERT INTO employees VALUES
       ( 100
       'Steven'
,'King'
,'SKING'
,'515.123.4567'
          TO_DATE('17-JUN-1987', 'dd-MON-yyyy')
'AD_PRES'
        , 24000
       , NULL
       , NULL
          90
       );
   INSERT INTO employees VALUES
       ( 101
          101
'Neena'
'Kochhar'
'NKOCHHAR'
'515.123.4568'
          TO_DATE('21-SEP-1989', 'dd-MON-yyyy')
        , 'AD_VP'
       , NULL
       , 100
       , 90
);
   INSERT INTO employees VALUES
       ( 102
, 'Lex'
, 'De Haan'
, 'LDEHAAN'
          TO_DATE('13-JAN-1993', 'dd-MON-yyyy')
       , 'AD_VP'
       , NULL
       , 100
       , 90
);
   INSERT INTO employees VALUES
       ( 103
, 'Alexander'
```

```
'Hunold'
'AHUNOLD'
       '590.423.4567'
       TO_DATE('03-JAN-1990', 'dd-MON-yyyy')
'IT_PROG'
    , 9000
    , NULL
    , 102
    , 60
);
INSERT INTO employees VALUES
    ( 104
       'Bruce'
'Ernst'
'BERNST'
       '590.423.4568'
       TO_DATE('21-MAY-1991', 'dd-MON-yyyy')
'IT_PROG'
    , 6000
    , NULL
    , 103
   , 60
);
INSERT INTO employees VALUES
   ( 105
, 'David'
, 'Austin'
, 'DAUSTIN'
, '590.423.4569'
    , J990.423.4509'
, TO_DATE('25-JUN-1997', 'dd-MON-yyyy')
, 'IT_PROG'
, 4800
    , NULL
    , 103
    , 60
);
INSERT INTO employees VALUES
    ( 106
, 'Valli'
, 'Pataballa
    , 'VPATABAL'
, '590.423.4560'
, TO_DATE('05-FEB-1998', 'dd-MON-yyyy')
    , 'IT_PROG'
, 4800
    , NULL
       103
       60
    , (
);
INSERT INTO employees VALUES
   ( 107
, 'Diana'
, 'Lorentz'
, 'DLORENTZ'
, '590.423.5567'
    , 590.423.5567'
, TO_DATE('07-FEB-1999', 'dd-MON-yyyy')
, 'IT_PROG'
, 4200
    , NULL
    , 103
      60
    );
INSERT INTO employees VALUES
   ( 108

( 108

, 'Nancy'

, 'Greenberg'

, 'NGREENBE'

, '515.124.4569'

, TO_DATE('17-AUG-1994', 'dd-MON-yyyy')
       'FI_MGR
      12000
    , NULL
    , 101
      100
INSERT INTO employees VALUES
    ( 109
       'Daniel'
'Faviet'
'DFAVIET'
'515.124.4169'
TO_DATE('16-AUG-1994', 'dd-MON-yyyy')
'FI_ACCOUNT'
      9000
    , NULL
       100
    );
INSERT INTO employees VALUES
    ( 110
, 'John'
, 'Chen'
       'JCHEN'
'515.124.4269'
TO_DATE('28-SEP-1997', 'dd-MON-yyyy')
'FI_ACCOUNT'
      8200
NULL
```

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          , 108
         , 100
);
    INSERT INTO employees VALUES
         ( 111
, 'Ismael'
, 'Sciarra'
, 'ISCIARRA'
, '515.124.4369'
, TO_DATE('30-SEP-1997', 'dd-MON-yyyy')
         , 'FI_ACCOUNT'
, 7700
          , NULL
         , 108
            100
          );
        SERT INTO employees VALUES
( 112
, 'Jose Manuel'
, 'Urman'
, 'JMURMAN'
, '515.124.4469'
, TO_DATE('07-MAR-1998', 'dd-MON-yyyy')
, 'FI_ACCOUNT'
, 7800
, NULL
    INSERT INTO employees VALUES
          , NULL
            100
          );
    INSERT INTO employees VALUES
        SERT INTO employees VALUES
( 113
, 'Luis'
, 'Popp'
, 'LPOPP'
, '515.124.4567'
, TO_DATE('07-DEC-1999', 'dd-MON-yyyy')
, 'FI_ACCOUNT'
          , 6900
          , NULL
          , 108
         , 100
);
    INSERT INTO employees VALUES
          ( 114
            114
'Den'
'Raphaely'
'DRAPHEAL'
'515,127,4561'
TO_DATE('07-DEC-1994', 'dd-MON-yyyy')
             'PU_MAN
            11000
          , NULL
          , 100
            30
    INSERT INTO employees VALUES
         ( 115
            'Alexander'
'Khoo'
'AKHOO'
'515.127.4562'
TO_DATE('18-MAY-1995', 'dd-MON-yyyy')
'PU_CLERK'
          , 3100
          , NULL
          , 114
             30
          ,
);
    INSERT INTO employees VALUES
         SERT INTO employees VALUES
( 116
, 'Shelli'
, 'Baida'
, 'SBAIDA'
, '515.127.4563'
, TO_DATE('24-DEC-1997', 'dd-MON-yyyy')
, 'PU_CLERK'
          , 2900
          , NULL
          , 114
         , 30
);
    INSERT INTO employees VALUES
( 117
, 'Sigal'
, 'Tobias'
, 'STOBIAS'
            '515.127.4564'
TO_DATE('24-JUL-1997', 'dd-MON-yyyy')
'PU_CLERK'
          , NULL
          , 114
         , 30
);
    INSERT INTO employees VALUES
         ( 118
, 'Guy'
```

```
'Himuro'
'GHIMURO'
       '515.127.4565'
TO_DATE('15-NOV-1998', 'dd-MON-yyyy')
'PU_CLERK'
    , 2600
    , NULL
    , 114
    , 30
);
INSERT INTO employees VALUES
    ( 119
       'Karen'
'Colmenares'
'KCOLMENA'
'515.127.4566'
       TO_DATE('10-AUG-1999', 'dd-MON-yyyy')
       'PU_CLERK'
    , 2500
    , NULL
    , 114
      30
INSERT INTO employees VALUES
    ( 120
, 'Matthew
       'Weiss'
'MWEISS'
'650.123.1234'
    , TO_DATE('18-JUL-1996', 'dd-MON-yyyy')
, 'ST_MAN'
, 8000
    , NULL
    , 100
    , 50
);
INSERT INTO employees VALUES
    ( 121
, 'Adam'
, 'Fripp'
       'AFRIPP'
'650.123.2234'
    , TO_DATE('10-APR-1997', 'dd-MON-yyyy')
    , 'ST_MAN'
, 8200
    , NULL
    , 100
       50
    );
INSERT INTO employees VALUES
   ( 122
, 'Payam'
, 'Kaufling'
, 'PKAUFLIN'
, '650.123.3234'
       TO_DATE('01-MAY-1995', 'dd-MON-yyyy')
    , 'ST_MAN'
, 7900
    , NULL
    , 100
      50
    ,
);
INSERT INTO employees VALUES
   ( 123

( 123

, 'Shanta'

, 'Vollman'

, 'SVOLLMAN'

, '650.123.4234'

, TO_DATE('10-OCT-1997', 'dd-MON-yyyyy')
       'ST_MAN
    , 6500
    , NULL
, 100
       50
INSERT INTO employees VALUES
    ( 124
      'Kevin'
'Mourgos'
'KMOURGOS'
'650.123.5234'
TO_DATE('16-NOV-1999', 'dd-MON-yyyy')
'ST_MAN'
    , 5800
    , NULL
    , 100
       50
    ,
);
INSERT INTO employees VALUES
    ( 125
, 'Julia'
, 'Nayer'
       'JNÁYER'
       '650.124.1214'
TO_DATE('16-JUL-1997', 'dd-MON-yyyy')
'ST_CLERK'
       3200
     , NULL
```

```
21/05/23, 22.48
         , 120
         , 50
);
    INSERT INTO employees VALUES
         ( 126

( 126

, 'Irene'

, 'Mikkilineni'

, 'IMIKKILI'

, '650.124.1224'

, TO_DATE('28-SEP-1998', 'dd-MON-yyyy')

'CT CLEBY'
         , 'ST_CLERK'
, 2700
         , NULL
         , 120
            50
         );
        ISERT INTO employees VALUES
( 127
, 'James'
, 'Landry'
, 'JLANDRY'
, '650.124.1334'
, TO_DATE('14-JAN-1999', 'dd-MON-yyyy')
, 'ST_CLERK'
, 2400
, NULL
    INSERT INTO employees VALUES
         , NULL
         , 120
            50
         );
    INSERT INTO employees VALUES
         ( 128
, 'Steven'
, 'Markle'
, 'SMARKLE'
, '650.124.1434'
, TO_DATE('08-MAR-2000', 'dd-MON-yyyy')
             'ST_CLERK'
         , 2200
         , NULL
, 120
         , 50
);
    INSERT INTO employees VALUES
         SERT INTO employees VALUES
( 129
, 'Laura'
, 'Bissot'
, 'LBISSOT'
, '550.124.5234'
, TO_DATE('20-AUG-1997', 'dd-MON-yyyy')
, 'ST_CLERK'
          , 3300
         , NULL
         , 121
            50
    INSERT INTO employees VALUES
         ( 130
             'Mozhe'
'Atkinson
             'MATKINSO'
            '650.124.6234'
TO_DATE('30-OCT-1997', 'dd-MON-yyyy')
'ST_CLERK'
          , 2800
         , NULL
         , 121
             50
         ,
);
        SERI INTO employees VALUES
( 131
, 'James'
, 'Marlow'
, 'JAMRLOW'
, '650.124.7234'
, TO_DATE('16-FEB-1997', 'dd-MON-yyyy')
, 'ST_CLERK'
, 2500
, NULL
    INSERT INTO employees VALUES
         , NULL
         , 121
            50
         , !
);
    INSERT INTO employees VALUES
         ( 132
, 'TJ'
, 'Olson'
, 'TJOLSON'
             '650.124.8234'
            TO_DATE('10-APR-1999', 'dd-MON-yyyy')
'ST_CLERK'
         , 2100
         , NULL
          , 121
         , 50
);
    INSERT INTO employees VALUES
         ( 133
, 'Jason'
```

```
, 'Mallin'
, 'JMALLIN'
       '650.127.1934'
TO_DATE('14-JUN-1996', 'dd-MON-yyyy')
'ST_CLERK'
     , 3300
    , NULL
    , 122
    , 50
);
INSERT INTO employees VALUES
   ( 134
, 'Michael'
, 'Rogers'
, 'MROGERS'
        '650.127.1834'
       TO_DATE('26-AUG-1998', 'dd-MON-yyyy')
'ST_CLERK'
     , 2900
    , NULL
    , 122
   , 50
);
INSERT INTO employees VALUES
    ( 135
, 'Ki'
, 'Gee'
, 'KGEE'
    , obe.127.1734'
, TO_DATE('12-DEC-1999', 'dd-MON-yyyy')
, 'ST_CLERK'
, 2400
    , NULL
    , 122
    , 50
);
INSERT INTO employees VALUES
    ( 136
, 'Hazel'
, 'Philtanker'
        'HPHILTAN'
    , '650.127.1634'
, TO_DATE('06-FEB-2000', 'dd-MON-yyyy')
    , 'ST_CLERK'
, 2200
    , NULL
    , 122
       50
    );
   SERT INTO employees VALUES
( 137
, 'Renske'
, 'Ladwig'
, 'RLADWIG'
, '650.121.1234'
, TO_DATE('14-JUL-1995', 'dd-MON-yyyy')
, 'ST_CLERK'
, 3600
, NULL
INSERT INTO employees VALUES
     , NULL
    , 123
       50
    ,
);
INSERT INTO employees VALUES
    ( 138
( 138
, 'Stephen'
, 'Stiles'
, 'SSTILES'
, '650.121.2034'
, TO_DATE('26-OCT-1997', 'dd-MON-yyyy')
        'ST_CLERK'
    , 3200
    , NULL
    , 123
       50
INSERT INTO employees VALUES
    SERT INTO employees VALUES
( 139
, 'John'
, 'Seo'
, 'JSEO'
, 'JSEO'
, TO_DATE('12-FEB-1998', 'dd-MON-yyyy')
, 'ST_CLERK'
     , 2700
    , NULL
    , 123
        50
    ,
);
INSERT INTO employees VALUES
    ( 140
, 'Joshua'
, 'Patel'
        'JPATEL'
       '650.121.1834'
TO_DATE('06-APR-1998', 'dd-MON-yyyy')
        'ST_CLERK'
       2500
     , NULL
```

```
21/05/23, 22.48
        , 123
        , 50
);
    INSERT INTO employees VALUES
        ( 141
, 'Trenna'
, 'Rajs'
, 'TRAJS'
        , TO_DATE('17-OCT-1995', 'dd-MON-yyyy')
, 'ST_CLERK'
        , 3500
        , NULL
        , 124
           50
        );
    INSERT INTO employees VALUES
        ( 142

, 'Curtis'

, 'Davies'

, 'CDAVIES'

, '650.121.2994'

, TO_DATE('29-JAN-1997', 'dd-MON-yyyy')
        , 'O_DATE('2
, 'ST_CLERK'
, 3100
        , NULL
        , 124
          50
        );
    INSERT INTO employees VALUES
        ( 143
, 'Randall'
, 'Matos'
         , matos
, 'RMATOS'
, '650.121.2874'
, TO_DATE('15-MAR-1998', 'dd-MON-yyyy')
, 'ST_CLERK'
        , 2600
        , NULL
, 124
        , 50
);
    INSERT INTO employees VALUES
       SERT INTO employees values
( 144
, 'Peter'
, 'Vargas'
, 'PVARGAS'
, '650.121.2004'
, TO_DATE('09-JUL-1998', 'dd-MON-yyyy')
        , 'O_DATE('0
, 'ST_CLERK'
, 2500
        , NULL
        , 124
           50
    INSERT INTO employees VALUES
        ( 145
        , 'John'
, 'Russell'
, 'JRUSSEL'
           '011.44.1344.429268'
TO_DATE('01-OCT-1996', 'dd-MON-yyyy')
'SA_MAN'
         , 14000
        , .4
           80
        );
    INSERT INTO employees VALUES
        ( 146
           'Karen'
'Partners
           'KPARTNER'
           '011.44.1344.467268'
TO_DATE('05-JAN-1997', 'dd-MON-yyyy')
'SA_MAN'
        , 'SA_M
, 13500
        , .3
, 100
           80
        );
   INSERT INTO employees VALUES
           'Alberto'
'Errazuriz'
'AERRAZUR'
            '011.44.1344.429278'
           TO_DATE('10-MAR-1997', 'dd-MON-yyyy')
'SA_MAN'
        , 12000
        , .3
        , 80
);
    INSERT INTO employees VALUES
        ( 148
, 'Gerald'
```

```
'Cambrault'
'GCAMBRAU'
       '011.44.1344.619268'
       TO_DATE('15-OCT-1999', 'dd-MON-yyyy')
'SA_MAN'
    , 11000
    , .3
      80
    ,
);
INSERT INTO employees VALUES
   ( 149
, 'Eleni'
, 'Zlotkey'
, 'EZLOTKEY'
, '011.44.1344.429018'
       TO_DATE('29-JAN-2000', 'dd-MON-yyyy')
        'SA MAN'
    , 10500
    , 100
    , 80
);
INSERT INTO employees VALUES
    ( 150
, 'Peter'
, 'Tucker'
       'PTUCKER'
'011.44.1344.129268'
    , VAL.-4-,1544-129268'
, TO_DATE('30-JAN-1997', 'dd-MON-yyyy')
, 'SA_REP'
, 10000
   , .3
, 145
    , 80
);
INSERT INTO employees VALUES
    ( 151
, 'David'
, 'Bernstein'
       'DBERNSTE'
       '011.44.1344.345268'
TO_DATE('24-MAR-1997', 'dd-MON-yyyy')
    , 'SA_REP'
, 9500
    , .25
       145
      80
    );
INSERT INTO employees VALUES
   ( 152

( 154

, 'Peter'

, 'Hall'

, 'PHALL'

, '011.44.1344.478968'
    , v11.44.1344.478968'
, TO_DATE('20-AUG-1997', 'dd-MON-yyyy')
, 'SA_REP'
, 9000
   , .25
, 145
      80
    ,
);
INSERT INTO employees VALUES
    ( 153
, 'Christopher'
, 'Olsen'
       'COLSEN'
       '011.44.1344.498718'
TO_DATE('30-MAR-1998', 'dd-MON-yyyy')
       'SA_REP
    , 8000
       145
      80
INSERT INTO employees VALUES
    ( 154
       'Nanette'
'Cambrault
       'NCAMBRAU'
       '011.44.1344.987668'
TO_DATE('09-DEC-1998', 'dd-MON-yyyy')
'SA_REP'
    , 7500
    , .2
, 145
       80
   ,
);
INSERT INTO employees VALUES
    ( 155
       'Oliver'
'Tuvault'
       'OTUVAULT'
       '011.44.1344.486508'
TO_DATE('23-NOV-1999', 'dd-MON-yyyy')
       'SA_REP'
       7000
       .15
```

```
21/05/23, 22.48
        , 145
        , 80
    INSERT INTO employees VALUES
        ( 156
, 'Janette'
, 'King'
, 'JKING'
, '011.44.1345.429268'
         , TO_DATE('30-JAN-1996', 'dd-MON-yyyy')
           'SA_REP'
         , 10000
        , .35
, 146
           80
        );
    INSERT INTO employees VALUES
        SERT INIO employees values
( 157
, 'Patrick'
, 'Sully'
, 'PSULLY'
, '011.44.1345.929268'
, TO_DATE('04-MAR-1996', 'dd-MON-yyyy')
            'SA_REP'
         , 9500
        , .35
           80
        , ;
);
    INSERT INTO employees VALUES
        ( 158
, 'Allan'
, 'McEwen'
           'AMCEWEN'
           '011.44.1345.829268'
TO_DATE('01-AUG-1996', 'dd-MON-yyyy')
           'SA_REP
         , 9000
        , .35
, 146
        , 80
);
    INSERT INTO employees VALUES
        SERT INTO employees VALUES
( 159
, 'Lindsey'
, 'Smith'
, 'LSMTTH'
, '011.44.1345.729268'
, TO_DATE('10-MAR-1997', 'dd-MON-yyyy')
, 'SA_REP'
         , 8000
        , .3
, 146
           80
        );
    INSERT INTO employees VALUES
        ( 160
           'Louise'
'Doran'
'LDORAN'
           '011.44.1345.629268'
TO_DATE('15-DEC-1997', 'dd-MON-yyyy')
'SA_REP'
         , 7500
        , .3
           80
        ,
);
    INSERT INTO employees VALUES
        ( 161
           'Sarath'
'Sewall'
           'SSEWALL'
           '011.44.1345.529268'
TO_DATE('03-NOV-1998', 'dd-MON-yyyy')
'SA_REP'
        , 'SA_I
, 7000
           .25
         , 146
           80
        );
    INSERT INTO employees VALUES
        ( 162
, 'Clara'
, 'Vishney'
, 'CVISHNEY'
            '011.44.1346.129268'
           TO_DATE('11-NOV-1997', 'dd-MON-yyyy')
'SA_REP'
         , 10500
        , .25
, 147
        , 80
);
    INSERT INTO employees VALUES
        ( 163 , 'Danielle'
```

```
'Greene'
'DGREENE'
       '011.44.1346.229268'
      TO_DATE('19-MAR-1999', 'dd-MON-yyyy')
'SA_REP'
    , 9500
   , .15
, 147
   , 80
);
INSERT INTO employees VALUES
    ( 164
       'Mattea'
       'Marvins'
       'MMARVINS
       '011.44.1346.329268'
      TO_DATE('24-JAN-2000', 'dd-MON-yyyy')
'SA_REP'
    , 7200
    , 147
  , 80
);
INSERT INTO employees VALUES
   ( 165
, 'David'
      'Lee'
'DLEE'
'011.44.1346.529268'
   , v11.44.1346.529268'
, TO_DATE('23-FEB-2000', 'dd-MON-yyyy')
, 'SA_REP'
, 6800
    , 147
   , 80
);
INSERT INTO employees VALUES
   ( 166
, 'Sundar'
, 'Ande'
       'SANDE'
      '011.44.1346.629268'
TO_DATE('24-MAR-2000', 'dd-MON-yyyy')
    , 'SA_REP'
    , .10
      147
      80
    );
INSERT INTO employees VALUES
   ( 167
, 'Amit'
      'Banda'
'ABANDA'
'011.44.1346.729268'
    , TO_DATE('21-APR-2000', 'dd-MON-yyyy')
    , 'SA_REP'
, 6200
    , .10
, 147
      80
    );
INSERT INTO employees VALUES
   ( 168
, 'Lisa'
, 'Ozer'
      'LOZER'
'011.44.1343.929268'
       TO_DATE('11-MAR-1997', 'dd-MON-yyyy')
       'SA_REP
    , 11500
   , .25
, 148
      80
INSERT INTO employees VALUES
    ( 169
      'Harrison'
'Bloom'
       'HBLOOM'
      '011.44.1343.829268'
TO_DATE('23-MAR-1998', 'dd-MON-yyyy')
'SA_REP'
    , 10000
    , .20
, 148
      80
    );
INSERT INTO employees VALUES
   SERI INIO employees VALUES
( 170
, 'Tayler'
, 'Fox'
, 'TFOX'
, '011.44.1343.729268'
, TO_DATE('24-JAN-1998', 'dd-MON-yyyy')
, 'SA_REP'
       9600
       .20
```

```
INSERT INTO employees VALUES
     ( 171
, 'William'
, 'Smith'
        'WSMITH'
'011.44.1343.629268'
      , TO_DATE('23-FEB-1999', 'dd-MON-yyyy')
     , 'SA_REP'
, 7400
     , .15
, 148
       80
     );
INSERT INTO employees VALUES
    SERT INIO employees values
( 172
, 'Elizabeth'
, 'Bates'
, 'EBATES'
, '011.44.1343.529268'
, TO_DATE('24-MAR-1999', 'dd-MON-yyyy')
     , 'SA_REP'
, 7300
     , .15
     , 148
        80
     , ;
);
INSERT INTO employees VALUES
    SERT INTO employees VALUES
( 173
, 'Sundita'
, 'Kumar'
, 'SKUMAR'
, '011.44.1343.329268'
, TO_DATE('21-APR-2000', 'dd-MON-yyyy')
, 'SA_REP'
     , 6100
     , .10
, 148
     , 80
);
INSERT INTO employees VALUES
     ( 174
        'Ellen'
'Abel'
        '011.44.1644.429267'
TO_DATE('11-MAY-1996', 'dd-MON-yyyy')
'SA_REP'
     , 11000
     , .30
, 149
       80
     );
INSERT INTO employees VALUES
     ( 175
     , 'Alyssa'
, 'Hutton'
, 'AHUTTON'
        '011.44.1644.429266'
TO_DATE('19-MAR-1997', 'dd-MON-yyyy')
'SA_REP'
      , 8800
     , .25
, 149
        80
     ,
);
INSERT INTO employees VALUES
    ( 176
, 'Jonathon'
, 'Taylor'
, 'JTAYLOR'
        '011.44.1644.429265'
TO_DATE('24-MAR-1998', 'dd-MON-yyyy')
'SA_REP'
      , 8600
        .20
     , 149
        80
     );
INSERT INTO employees VALUES
( 177
, 'Jack'
, 'Livingston'
, 'JLIVINGS'
         '011.44.1644.429264'
        TO_DATE('23-APR-1998', 'dd-MON-yyyy')
'SA_REP'
     , 8400
     , .20
, 149
     , 80
);
INSERT INTO employees VALUES
     ( 178
, 'Kimberely'
```

```
'Grant'
'KGRANT'
       '011.44.1644.429263'
       TO_DATE('24-MAY-1999', 'dd-MON-yyyy')
'SA_REP'
    , 7000
    , .15
, 149
      NULL
INSERT INTO employees VALUES
    ( 179
       'Charles'
'Johnson'
'CJOHNSON'
       '011.44.1644.429262'
    TO_DATE('04-JAN-2000', 'dd-MON-yyyy')
, 'SA_REP'
, 6200
    , 149
   , 80
);
INSERT INTO employees VALUES
   ( 180
, 'Winston'
, 'Taylor'
, 'WTAYLOR'
, '650.507.9876'
    , TO_DATE('24-JAN-1998', 'dd-MON-yyyy')
, 'SH_CLERK'
, 3200
    , NULL
    , 120
    , 50
);
INSERT INTO employees VALUES
   ( 181
, 'Jean'
, 'Fleaur'
, 'JFLEAUR'
      '650.507.9877'
TO_DATE('23-FEB-1998', 'dd-MON-yyyy')
       'SH_CLERK'
    , 3100
    , NULL
       120
       50
    ,
);
   SERT INTO employees VALUES
( 182
, 'Martha'
, 'Sullivan'
, 'MSULLIVA'
, '650.507.9878'
, TO_DATE('21-JUN-1999', 'dd-MON-yyyy')
, 'SH_CLERK'
, 2500
, NULL
INSERT INTO employees VALUES
    , NULL
    , 120
      50
    ,
);
INSERT INTO employees VALUES
    ( 183
, 'Girard'
, 'Geoni'
      'GGEONI'
'650.507.9879'
TO_DATE('03-FEB-2000', 'dd-MON-yyyy')
       'SH_CLERK'
    , 2800
    , NULL
       120
       50
INSERT INTO employees VALUES
    ( 184
       'Nandita'
'Sarchand'
       'NSARCHAN'
      '659.599.1876'
TO_DATE('27-JAN-1996', 'dd-MON-yyyy')
'SH_CLERK'
    , 4200
    , NULL
       50
   ,
);
INSERT INTO employees VALUES
    ( 185
      'Alexis'
'Bull'
       'ABULL'
       '650.509.2876'
TO_DATE('20-FEB-1997', 'dd-MON-yyyy')
       'SH_CLERK'
       4100
      NULL
```

```
21/05/23, 22.48
         , 121
         , 50
);
        SERT INTO employees VALUES
( 186
, 'Julia'
, 'Dellinger'
, 'JDELLING'
, '650.509.3876'
, TO_DATE('24-JUN-1998', 'dd-MON-yyyy')
, 'SH_CLERK'
, 3400
, NULL
    INSERT INTO employees VALUES
         , NULL
, 121
           50
         );
    INSERT INTO employees VALUES
         ( 187
         , 'Anthony'
            'ACABRIO'
'650.509.4876'
TO_DATE('07-FEB-1999', 'dd-MON-yyyy')
             'SH_CLERK'
         , 3000
         , NULL
         , 121
           50
         );
    INSERT INTO employees VALUES
        SERT INTO employees VALUES
( 188
, 'Kelly'
, 'Chung'
, 'KCHUNG'
, '650.505.1876'
, TO_DATE('14-JUN-1997', 'dd-MON-yyyy')
, 'SH_CLERK'
         , 3800
         , NULL
, 122
         , 50
);
    INSERT INTO employees VALUES
        SERT INTO employees VALUES
( 189
, 'Jennifer'
, 'Dilly'
, 'JDILLY'
, '550.505.2876'
, TO_DATE('13-AUG-1997', 'dd-MON-yyyy')
, 'SH_CLERK'
         , 3600
         , NULL
         , 122
            50
    INSERT INTO employees VALUES
         ( 190
            'Timothy'
'Gates'
'TGATES'
'650.505.3876'
TO_DATE('11-JUL-1998', 'dd-MON-yyyy')
'SH_CLERK'
         , 2900
         , NULL
         , 122
            50
         ,
);
    INSERT INTO employees VALUES
         ( 191
            'Randall'
'Perkins'
            'RPERKINS'
            "650.505.4876'
TO_DATE('19-DEC-1999', 'dd-MON-yyyy')
'SH_CLERK'
         , 2500
         , NULL
         , 122
           50
         ,
);
    INSERT INTO employees VALUES
( 192
            'Sarah'
'Bell'
'SBELL'
            '650.501.1876'
TO_DATE('04-FEB-1996', 'dd-MON-yyyy')
'SH_CLERK'
         , 4000
         , NULL
         , 123
        , 50
);
    INSERT INTO employees VALUES
         ( 193
, 'Britney'
```

```
'Everett
       'BEVERETT'
       '650.501.2876'
       TO_DATE('03-MAR-1997', 'dd-MON-yyyy')
'SH_CLERK'
    , 3900
    , NULL
    , 123
      50
    ,
);
INSERT INTO employees VALUES
   ( 194
, 'Samuel'
, 'McCain'
, 'SMCCAIN'
       '650.501.3876'
      TO_DATE('01-JUL-1998', 'dd-MON-yyyy')
'SH_CLERK'
    , 3200
    , NULL
    , 123
   , 50
);
INSERT INTO employees VALUES
   ( 195
, 'Vance'
, 'Jones'
, 'VJONES'
    , TO_DATE('17-MAR-1999', 'dd-MON-yyyy')
, 'SH_CLERK'
, 2800
    , NULL
    , 123
    , 50
);
INSERT INTO employees VALUES
    ( 196
, 'Alana'
, 'Walsh'
    , 'AWALSH'
, '650.507.9811'
, TO_DATE('24-APR-1998', 'dd-MON-yyyy')
       'SH_CLERK'
    , 3100
    , NULL
    , 124
      50
    ,
);
   SERT INTO employees VALUES
( 197
, 'Kevin'
, 'Feeney'
, 'KFEENEY'
, 'G50.507.9822'
, TO_DATE('23-MAY-1998', 'dd-MON-yyyy')
, 'SH_CLERK'
, 3000
, NULL
INSERT INTO employees VALUES
    , NULL
    , 124
      50
    ,
);
INSERT INTO employees VALUES
    ( 198
, 'Donald'
, 'OConnell'
       'DOCONNEL'
       '650.507.9833'
TO_DATE('21-JUN-1999', 'dd-MON-yyyy')
       'SH_CLERK'
    , 2600
    , NULL
, 124
      50
INSERT INTO employees VALUES
    ( 199
       'Douglas
'Grant'
      'Grant
'DGRANT'
'650.507.9844'
TO_DATE('13-JAN-2000', 'dd-MON-yyyy')
'SH_CLERK'
    , 2600
    , NULL
       50
   ,
);
INSERT INTO employees VALUES
    ( 200
, 'Jennifer'
, 'Whalen'
       'JWHALEN'
       JWHALEN
'515.123.4444'
TO_DATE('17-SEP-1987', 'dd-MON-yyyy')
'AD_ASST'
       4400
      NULL
```

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21/05/23, 22.48
        , 101
        , 10
);
    INSERT INTO employees VALUES
        ( 201
, 'Michael
           'Hartstein'
        , 'MHARTSTE'
, '515.123.5555'
, TO_DATE('17-FEB-1996', 'dd-MON-yyyy')
           'MK_MAN'
        , 13000
        , NULL
        , 100
          20
        );
    INSERT INTO employees VALUES
        ( 202
, 'Pat'
, 'Fay'
          PFAY'
'PFAY'
'603.123.6666'
TO_DATE('17-AUG-1997', 'dd-MON-yyyy')
           'MK_REP
        , 6000
        , NULL
           20
        );
    INSERT INTO employees VALUES
       SERI INIO employees valots
( 203
, 'Susan'
, 'Mavris'
, 'SMAVRIS'
, '515.123.7777'
, TO_DATE('07-JUN-1994', 'dd-MON-yyyy')
'un pep'
          'HR_REP
        , 6500
        , NULL
, 101
        , 40
);
    INSERT INTO employees VALUES
        ( 204
           'Hermann'
'Baer'
          "HBAER'
'515.123.8888'
TO_DATE('07-JUN-1994', 'dd-MON-yyyy')
'PR_REP'
        , 10000
        , NULL
        , 101
          70
    INSERT INTO employees VALUES
        ( 205
          'Shelley'
'Higgins'
'SHIGGINS'
'515.123.8080'
TO_DATE('07-JUN-1994', 'dd-MON-yyyy')
'AC_MGR'
        , 12000
        , NULL
        , 101
           110
        ,
);
    INSERT INTO employees VALUES
        ( 206
        , 'William'
, 'Gietz'
        , 'Gletz'
, 'WGIETZ'
, '515.123.8181'
, TO_DATE('07-JUN-1994', 'dd-MON-yyyy')
, 'AC_ACCOUNT'
, 8300
        , NULL
        , 205
        );
    REM ******* insert data into the JOB_HISTORY table
    INSERT INTO job_history
       DERI INIU JOD_NISTORY
VALUES (102
, TO_DATE('13-JAN-1993', 'dd-MON-yyyy')
, TO_DATE('24-JUL-1998', 'dd-MON-yyyy')
, 'IT_PROG'
        , 60);
```

```
INSERT INTO job_history
         VALUES (101
    TO_DATE('28-OCT-1993', 'dd-MON-yyyy')
TO_DATE('15-MAR-1997', 'dd-MON-yyyy')
     'AC MGR
   , 110);
INSERT INTO job_history
   VALUES (201
, TO_DATE('17-FEB-1996', 'dd-MON-yyyy')
, TO_DATE('19-DEC-1999', 'dd-MON-yyyy')
     'MK_REP'
   , 20);
INSERT INTO job_history
         VALUES (114
   TO_DATE('24-MAR-1998', 'dd-MON-yyyy')
TO_DATE('31-DEC-1999', 'dd-MON-yyyy')
   , 'ST_CLERK'
     50
   );
50
   );
90
   );
, 'SA_REP
   , 80
   );
, 80
   );
INSERT INTO job_history
VALUES (200
, TO_DATE('01-JUL-1994', 'dd-MON-yyyy')
, TO_DATE('31-DEC-1998', 'dd-MON-yyyy')
     'AC_ACCOUNT
     90
   );
REM enable integrity constraint to DEPARTMENTS
ALTER TABLE departments ENABLE CONSTRAINT dept_mgr_fk;
COMMIT:
CREATE INDEX emp_department_ix
   ON employees (department_id);
CREATE INDEX emp_job_i>
   ON employees (job_id);
CREATE INDEX emp_manager_ix
   ON employees (manager_id);
CREATE INDEX emp_name_ix
   ON employees (last_name, first_name);
CREATE INDEX dept_location_ix
   ON departments (location_id);
CREATE INDEX jhist_job_ix
   ON job_history (job_id);
CREATE INDEX jhist_employee_ix
   ON job_history (employee_id);
CREATE INDEX jhist_department_ix
   ON job_history (department_id);
CREATE INDEX loc_city_ix
   ON locations (city);
CREATE INDEX loc_state_province_ix
   ON locations (state_province);
CREATE INDEX loc_country_ix
   ON locations (country_id);
COMMIT;
REM procedure and statement trigger to allow dmls during business hours: CREATE OR REPLACE PROCEDURE secure_dml
```

```
IF TO_CHAR (SYSDATE, 'HH24:MI') NOT BETWEEN '08:00' AND '18:00' OR TO_CHAR (SYSDATE, 'DY') IN ('SAT', 'SUN') THEN RAISE_APPLICATION_ERROR (-20205,
    You may only make changes during normal office hours');
   END IF;
   END secure_dml;
CREATE OR REPLACE TRIGGER secure_employees
BEFORE INSERT OR UPDATE OR DELETE ON employees
   BEGIN
   secure dml:
   END secure_employees;
ALTER TRIGGER secure_employees DISABLE;
REM procedure to add a row to the JOB HISTORY table and row trigger
REM to call the procedure when data is updated in the job_id or
REM department_id columns in the EMPLOYEES table:
CREATE OR REPLACE PROCEDURE add_job_history
   ( p_emp_id job_history.employee_id%type
, p_start_date job_history.start_date%type
   , p_end_date job_history.end_date%type
   , p_job_id job_history.job_id%type
, p_department_id job_history.department_id%type
   TS
   BEGIN
   INSERT INTO job_history (employee_id, start_date, end_date,
   job_id, department_id)
VALUES(p_emp_id, p_start_date, p_end_date, p_job_id, p_department_id);
   END add_job_history;
CREATE OR REPLACE TRIGGER update_job_history
AFTER UPDATE OF job_id, department_id ON employees
   FOR EACH ROW
   BEGIN
   add_job_history(:old.employee_id, :old.hire_date, sysdate,
:old.job_id, :old.department_id);
   END;
COMMIT;
COMMENT ON TABLE regions
          IS 'Regions table that contains region numbers and names. Contains 4 rows; references with the Countries table.';
COMMENT ON COLUMN regions.region_id
          IS 'Primary key of regions table.';
COMMENT ON COLUMN regions.region_name
          IS 'Names of regions. Locations are in the countries of these regions.';
COMMENT ON TABLE locations
          IS 'Locations table that contains specific address of a specific office,
          warehouse, and/or production site of a company. Does not store addresses / locations of customers. Contains 23 rows; references with the
          departments and countries tables.
COMMENT ON COLUMN locations.location_id
          IS 'Primary key of locations table';
COMMENT ON COLUMN locations.street_address
IS 'Street address of an office, warehouse, or production site of a company.
Contains building number and street name';
COMMENT ON COLUMN locations.postal_code
          IS 'Postal code of the location of an office, warehouse, or production site
          of a company.
COMMENT ON COLUMN locations.city
          IS 'A not null column that shows city where an office, warehouse, or
          production site of a company is located. ';
COMMENT ON COLUMN locations.state_province

IS 'State or Province where an office, warehouse, or production site of a
          company is located.';
COMMENT ON COLUMN locations.country_id
          IS 'Country where an office, warehouse, or production site of a company is
          located. Foreign key to country_id column of the countries table.';
REM ****************************
COMMENT ON TABLE departments
          IS 'Departments table that shows details of departments where employees
          work. Contains 27 rows; references with locations, employees, and job_history tables.';
COMMENT ON COLUMN departments.department id
          IS 'Primary key column of departments table.';
COMMENT ON COLUMN departments.department_name
          IS 'A not null column that shows name of a department. Administration
          Marketing, Purchasing, Human Resources, Shipping, IT, Executive, Public Relations, Sales, Finance, and Accounting. ';
COMMENT ON COLUMN departments.manager_id
          IS 'Manager_id of a department. Foreign key to employee_id column of employees table. The manager_id column of the employee table references
COMMENT ON COLUMN departments.location_id
          IS 'Location id where a department is located. Foreign key to location_id column of locations table.';
```

```
REM ****************************
COMMENT ON TABLE job_history
          IS 'Table that stores job history of the employees. If an employee
          changes departments within the job or changes jobs within the department,
          new rows get inserted into this table with old job information of the
          employee. Contains a complex primary key: employee_id+start_date.
Contains 25 rows. References with jobs, employees, and departments tables.';
COMMENT ON COLUMN job_history.employee_id
          IS 'A not null column in the complex primary key employee_id+start_date. Foreign key to employee_id column of the employee table';
COMMENT ON COLUMN job_history.start_date

IS 'A not null column in the complex primary key employee_id+start_date.
          Must be less than the end_date of the job_history table. (enforced by
          constraint jhist_date_interval)';
COMMENT ON COLUMN job_history.end_date

IS 'Last day of the employee in this job role. A not null column. Must be greater than the start_date of the job_history table.
          (enforced by constraint jhist_date_interval)';
COMMENT ON COLUMN job_history.job_id $\operatorname{IS}$ 'Job role in which the employee worked in the past; foreign key to
          job_id column in the jobs table. A not null column.';
{\tt COMMENT\ ON\ COLUMN\ job\_history.department\_id}
          IS 'Department id in which the employee worked in the past; foreign key to department id column in the departments table';
COMMENT ON TABLE countries
          IS 'country table. Contains 25 rows. References with locations table.';
COMMENT ON COLUMN countries.country_id
          IS 'Primary key of countries table.';
COMMENT ON COLUMN countries.country_name
          IS 'Country name';
COMMENT ON COLUMN countries.region_id
          IS 'Region ID for the country. Foreign key to region_id column in the departments table.';
REM ****************************
COMMENT ON TABLE jobs
          IS 'jobs table with job titles and salary ranges. Contains 19 rows. References with employees and job_history table.';
COMMENT ON COLUMN jobs.job_id

IS 'Primary key of jobs table.';
COMMENT ON COLUMN jobs.job_title

IS 'A not null column that shows job title, e.g. AD_VP, FI_ACCOUNTANT';
COMMENT ON COLUMN jobs.min_salary IS 'Minimum salary for a job title.';
COMMENT ON COLUMN jobs.max_salary
          IS 'Maximum salary for a job title';
REM ****************************
COMMENT ON TABLE employees
          IS 'employees table. Contains 107 rows. References with departments.
          jobs, job_history tables. Contains a self reference.';
COMMENT ON COLUMN employees.employee_id
          IS 'Primary key of employees table.';
COMMENT ON COLUMN employees.first_name
          IS 'First name of the employee. A not null column.';
{\tt COMMENT\ ON\ COLUMN\ employees.last\_name}
          IS 'Last name of the employee. A not null column.';
COMMENT ON COLUMN employees.email
          IS 'Email id of the employee';
COMMENT ON COLUMN employees.phone_number  \hbox{IS 'Phone number of the employee; includes country code and area code';} \\
COMMENT ON COLUMN employees.hire date
          IS 'Date when the employee started on this job. A not null column.';
COMMENT ON COLUMN employees.job_id
          IS 'Current job of the employee; foreign key to job_id column of the
          jobs table. A not null column.';
COMMENT ON COLUMN employees.salary

IS 'Monthly salary of the employee. Must be greater
          than zero (enforced by constraint emp_salary_min)';
COMMENT ON COLUMN employees.commission_pct

IS 'Commission percentage of the employee; Only employees in sales department elgible for commission percentage';
COMMENT ON COLUMN employees.manager_id
          IS 'Manager id of the employee; has same domain as manager_id in
          departments table. Foreign key to employee id column of employees table. (useful for reflexive joins and CONNECT BY query)';
COMMENT ON COLUMN employees.department_id
          IS 'Department id where employee works; foreign key to department_id
```

column of the departments table';

COMMIT;