

Базы данных Монастырский М. О. С21-703

Вариант 5 лаб 1

```
CREATE TABLE countries(  
  id INTEGER PRIMARY KEY,  
  name VARCHAR(64) NOT NULL  
);  
CREATE TABLE dishes(  
  id INTEGER PRIMARY KEY,  
  name VARCHAR(2000) NOT NULL,  
  recepie VARCHAR(2000) NOT NULL,  
  ingredients VARCHAR(2000) NOT NULL,  
  category VARCHAR(22) NOT NULL,  
  timer numeric(10,1) NOT NULL,  
  difficulty VARCHAR(21) NOT NULL DEFAULT 'легкое',  
  country INTEGER NOT NULL REFERENCES countries(id),  
  CHECK(timer > 0),  
  CHECK(category in ('1-е блюдо', '2-е блюдо', 'салаты и закуски',  
    'десерт', 'безалкогольный напиток', 'алкогольный напиток')),  
  CHECK(difficulty in ('легкое', 'для опытного кулинара',  
    'для профессионала'))  
);  
  
INSERT INTO countries VALUES(1, 'Россия');  
INSERT INTO dishes(id, name, recepie, ingredients, category,  
  timer, country)  
VALUES (001,  
  'Оливье', 'все нарезать, смешать в кучу, залить майонезом',  
  'Курица, горошек, майонез, огурцы', 'салаты и закуски', 10.56, 1);  
  
SELECT * FROM dishes;
```

Вариант 2 лаб 2

```
SET DateStyle TO German;  
  
DROP TABLE IF EXISTS JOB_HISTORY;  
DROP TABLE IF EXISTS DEPARTMENTS CASCADE;  
DROP TABLE IF EXISTS EMPLOYEES;  
DROP TABLE IF EXISTS JOBS;  
DROP TABLE IF EXISTS LOCATIONS;  
DROP TABLE IF EXISTS COUNTRIES;
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```
DROP TABLE IF EXISTS REGIONS;

CREATE TABLE REGIONS
(
    region_id integer PRIMARY KEY,
    region_name varchar(64) NOT NULL UNIQUE
);

INSERT INTO regions
VALUES(1, 'Europe '),
(2, 'Americas '),
(3, 'Asia '),
(4, 'Middle East and Africa ');
-- DELETE FROM COUNTRIES;

CREATE TABLE COUNTRIES
(
    country_id varchar(2) PRIMARY KEY,
    country_name varchar(64) NOT NULL UNIQUE,
    region_id integer REFERENCES REGIONS(region_id) NOT NULL
);

INSERT INTO COUNTRIES VALUES
('AR', 'Argentina', 2),
('AU', 'Australia', 3),
('BE', 'Belgium', 1),
('BR', 'Brazil', 2),
('CA', 'Canada', 2),
('CH', 'Switzerland', 1),
('CN', 'China', 3),
('DE', 'Germany', 1),
('DK', 'Denmark', 1),
('EG', 'Egypt', 4),
('FR', 'France', 1),
('IL', 'Israel', 4),
('IN', 'India', 3),
('IT', 'Italy', 1),
('JP', 'Japan', 3),
('KW', 'Kuwait', 4),
('ML', 'Malaysia', 3),
('MX', 'Mexico', 2),
('NG', 'Nigeria', 4),
('NL', 'Netherlands', 1),
('SG', 'Singapore', 3),
('UK', 'United Kingdom', 1),
('US', 'United States of America', 2),
('ZM', 'Zambia', 4),
('ZW', 'Zimbabwe', 4);
-- DELETE FROM LOCATIONS;
```

```
CREATE TABLE LOCATIONS
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(  
    location_id integer PRIMARY KEY,  
    street_address varchar(64) NOT NULL,  
    postal_code varchar(16),  
    city varchar(64),  
    state_province varchar(64),  
    country_id varchar(2) REFERENCES COUNTRIES(country_id) NOT NULL  
);
```

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INSERT INTO LOCATIONS VALUES
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(1000, '1297 Via Cola di Rie', '989', 'Roma', '', 'IT'),  
(1100, '93091 Calle della Testa', '10934', 'Venice', '', 'IT'),  
(1200, '2017 Shinjuku-ku', '1689', 'Tokyo', 'Tokyo Prefecture', 'JP'),  
(1300, '9450 Kamiya-cho', '6823', 'Hiroshima', '', 'JP'),  
(1400, '2014 Jabberwocky Rd', '26192', 'Southlake', 'Texas', 'US'),  
(1500, '2011 Interiors Blvd', '99236', 'South San Francisco',  
'California', 'US'),  
(1600, '2007 Zagora St', '50090', 'South Brunswick', 'New Jersey', 'US'),  
(1700, '2004 Charade Rd', '98199', 'Seattle', 'Washington', 'US'),  
(1800, '147 Spadina Ave', 'M5V 2L7', 'Toronto', 'Ontario', 'CA'),  
(1900, '6092 Boxwood St', 'YSW 9T2', 'Whitehorse', 'Yukon', 'CA'),  
(2000, '40-5-12 Laogianggen', '190518', 'Beijing', '', 'CN'),  
(2100, '1298 Vileparle (E)', '490231', 'Bombay', 'Maharashtra', 'IN'),  
(2200, '12-98 Victoria Street', '2901', 'Sydney', 'New South Wales',  
'AU'),  
(2300, '198 Clementi North', '540198', 'Singapore', '', 'SG'),  
(2400, '8204 Arthur St', '', 'London', '', 'UK'),  
(2500, 'Magdalen Centre, The Oxford Science Park', 'OX9 9ZB', 'Oxford',  
'Oxford', 'UK'),  
(2600, '9702 Chester Road', '9629850293', 'Stretford', 'Manchester',  
'UK'),  
(2700, 'Schwanthalerstr. 7031', '80925', 'Munich', 'Bavaria', 'DE'),  
(2800, 'Rua Frei Caneca 1360 ', '01307-002', 'Sao Paulo', 'Sao Paulo',  
'BR'),  
(2900, '20 Rue des Corps-Saints', '1730', 'Geneva', 'Geneve', 'CH'),  
(3000, 'Murtenstrasse 921', '3095', 'Bern', 'BE', 'CH'),  
(3100, 'Pieter Breughelstraat 837', '3029SK', 'Utrecht', 'Utrecht',  
'NL');
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```
-- DELETE FROM JOBS;
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```
CREATE TABLE JOBS(
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    job_id varchar(16) PRIMARY KEY,  
    job_title varchar(64) NOT NULL UNIQUE,  
    min_salary numeric(8, 2) NOT NULL,  
    max_salary numeric(8, 2) NOT NULL  
);
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INSERT INTO jobs VALUES
('AD_PRES', 'President', 20080, 40000),
('AD_VP', 'Administration Vice President', 15000, 30000),
('AD_ASST', 'Administration Assistant', 3000, 6000),
('FI_MGR', 'Finance Manager', 8200, 16000),
('FI_ACCOUNT', 'Accountant', 4200, 9000),
('AC_MGR', 'Accounting Manager', 8200, 16000),
('AC_ACCOUNT', 'Public Accountant', 4200, 9000),
('SA_MAN', 'Sales Manager', 10000, 20080),
('SA_REP', 'Sales Representative', 6000, 12008),
('PU_MAN', 'Purchasing Manager', 8000, 15000),
('PU_CLERK', 'Purchasing Clerk', 2500, 5500),
('ST_MAN', 'Stock Manager', 5500, 8500),
('ST_CLERK', 'Stock Clerk', 2008, 5000),
('SH_CLERK', 'Shipping Clerk', 2500, 5500),
('IT_PROG', 'Programmer', 4000, 10000),
('MK_MAN', 'Marketing Manager', 9000, 15000),
('MK_REP', 'Marketing Representative', 4000, 9000),
('HR_REP', 'Human Resources Representative', 4000, 9000),
('PR_REP', 'Public Relations Representative', 4500, 10500);
-- DELETE FROM DEPARTMENTS;

CREATE TABLE EMPLOYEES
(
    employee_id integer PRIMARY KEY,
    first_name varchar(64) NOT NULL,
    last_name varchar(64) NOT NULL,
    email varchar(64) NOT NULL UNIQUE,
    phone_integer varchar(64) NOT NULL,
    hire_date timestamp NOT NULL,
    job_id varchar(16) REFERENCES JOBS(job_id),
    salary numeric(8, 2) NOT NULL,
    commission_pct numeric(5, 2),
    manager_id integer REFERENCES EMPLOYEES(employee_id),
    department_id integer
);

-- DELETE FROM EMPLOYEES;
INSERT INTO employees VALUES(100, 'Steven', 'King', 'SKING',
'515.123.4567', '17.06.2003', 'AD_PRES', 24000, NULL, NULL, 90);
INSERT INTO employees VALUES(101, 'Neena', 'Kochhar', 'NKOCHHAR',
'515.123.4568', '21.09.2005', 'AD_VP', 17000, NULL, 100, 90);
INSERT INTO employees VALUES(102, 'Lex', 'De Haan', 'LDEHAAN',
'515.123.4569', '13.01.2001', 'AD_VP', 17000, NULL, 100, 90);
INSERT INTO employees VALUES(103, 'Alexander', 'Hunold', 'AHUNOLD',
'590.423.4567', '03.01.2006', 'IT_PROG', 9000, NULL, 102, 60);
INSERT INTO employees VALUES(104, 'Bruce', 'Ernst', 'BERNST',
'590.423.4568', '21.05.2007', 'IT_PROG', 6000, NULL, 103, 60);
INSERT INTO employees VALUES(105, 'David', 'Austin', 'DAUSTIN',

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'590.423.4569', '25.06.2005', 'IT_PROG', 4800, NULL, 103, 60);
INSERT INTO employees VALUES(106, 'Valli', 'Pataballa', 'VPATABAL',
'590.423.4560', '05.02.2006', 'IT_PROG', 4800, NULL, 103, 60);
INSERT INTO employees VALUES(107, 'Diana', 'Lorentz', 'DLORENTZ',
'590.423.5567', '07.02.2007', 'IT_PROG', 4200, NULL, 103, 60);
INSERT INTO employees VALUES(108, 'Nancy', 'Greenberg', 'NGREENBE',
'515.124.4569', '17.08.2002', 'FI_MGR', 12008, NULL, 101, 100);
INSERT INTO employees VALUES(109, 'Daniel', 'Faviet', 'DFAVIET',
'515.124.4169', '16.08.2002', 'FI_ACCOUNT', 9000, NULL, 108, 100);
INSERT INTO employees VALUES(110, 'John', 'Chen', 'JCHEN',
'515.124.4269', '28.09.2005', 'FI_ACCOUNT', 8200, NULL, 108, 100);
INSERT INTO employees VALUES(111, 'Ismael', 'Sciarra', 'ISCIARRA',
'515.124.4369', '30.09.2005', 'FI_ACCOUNT', 7700, NULL, 108, 100);
INSERT INTO employees VALUES(112, 'Jose Manuel', 'Urman', 'JMURMAN',
'515.124.4469', '07.03.2006', 'FI_ACCOUNT', 7800, NULL, 108, 100);
INSERT INTO employees VALUES(113, 'Luis', 'Popp', 'LPOPP',
'515.124.4567', '07.12.2007', 'FI_ACCOUNT', 6900, NULL, 108, 100);
INSERT INTO employees VALUES(114, 'Den', 'Raphaeily', 'DRAPHEAL',
'515.127.4561', '07.12.2002', 'PU_MAN', 11000, NULL, 100, 30);
INSERT INTO employees VALUES(115, 'Alexander', 'Khoo', 'AKHOO',
'515.127.4562', '18.05.2003', 'PU_CLERK', 3100, NULL, 114, 30);
INSERT INTO employees VALUES(116, 'Shelli', 'Baida', 'SBAIDA',
'515.127.4563', '24.12.2005', 'PU_CLERK', 2900, NULL, 114, 30);
INSERT INTO employees VALUES(117, 'Sigal', 'Tobias', 'STOBIAS',
'515.127.4564', '24.07.2005', 'PU_CLERK', 2800, NULL, 114, 30);
INSERT INTO employees VALUES(118, 'Guy', 'Himuro', 'GHIMURO',
'515.127.4565', '15.11.2006', 'PU_CLERK', 2600, NULL, 114, 30);
INSERT INTO employees VALUES(119, 'Karen', 'Colmenares', 'KCOLMENA',
'515.127.4566', '10.08.2007', 'PU_CLERK', 2500, NULL, 114, 30);
INSERT INTO employees VALUES(120, 'Matthew', 'Weiss', 'MWEISS',
'650.123.1234', '18.07.2004', 'ST_MAN', 8000, NULL, 100, 50);
INSERT INTO employees VALUES(121, 'Adam', 'Fripp', 'AFRIPP',
'650.123.2234', '10.04.2005', 'ST_MAN', 8200, NULL, 100, 50);
INSERT INTO employees VALUES(122, 'Payam', 'Kaufling', 'PKAUFLIN',
'650.123.3234', '01.05.2003', 'ST_MAN', 7900, NULL, 100, 50);
INSERT INTO employees VALUES(123, 'Shanta', 'Vollman', 'SVOLLMAN',
'650.123.4234', '10.10.2005', 'ST_MAN', 6500, NULL, 100, 50);
INSERT INTO employees VALUES(124, 'Kevin', 'Mourgos', 'KMOURGOS',
'650.123.5234', '16.11.2007', 'ST_MAN', 5800, NULL, 100, 50);
INSERT INTO employees VALUES(125, 'Julia', 'Nayer', 'JNAYER',
'650.124.1214', '16.07.2005', 'ST_CLERK', 3200, NULL, 120, 50);
INSERT INTO employees VALUES(126, 'Irene', 'Mikkilineni', 'IMIKKILI',
'650.124.1224', '28.09.2006', 'ST_CLERK', 2700, NULL, 120, 50);
INSERT INTO employees VALUES(127, 'James', 'Landry', 'JLANDRY',
'650.124.1334', '14.01.2007', 'ST_CLERK', 2400, NULL, 120, 50);
INSERT INTO employees VALUES(128, 'Steven', 'Markle', 'SMARKLE',
'650.124.1434', '08.03.2008', 'ST_CLERK', 2200, NULL, 120, 50);
INSERT INTO employees VALUES(129, 'Laura', 'Bissot', 'LBISSOT',
'650.124.5234', '20.08.2005', 'ST_CLERK', 3300, NULL, 121, 50);
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INSERT INTO employees VALUES(130, 'Mozhe', 'Atkinson', 'MATKINSO',
'650.124.6234', '30.10.2005', 'ST_CLERK', 2800, NULL, 121, 50);
INSERT INTO employees VALUES(131, 'James', 'Marlow', 'JAMRLOW',
'650.124.7234', '16.02.2005', 'ST_CLERK', 2500, NULL, 121, 50);
INSERT INTO employees VALUES(132, 'TJ', 'Olson', 'TJOLSON',
'650.124.8234', '10.04.2007', 'ST_CLERK', 2100, NULL, 121, 50);
INSERT INTO employees VALUES(133, 'Jason', 'Mallin', 'JMALLIN',
'650.127.1934', '14.06.2004', 'ST_CLERK', 3300, NULL, 122, 50);
INSERT INTO employees VALUES(134, 'Michael', 'Rogers', 'MROGERS',
'650.127.1834', '26.08.2006', 'ST_CLERK', 2900, NULL, 122, 50);
INSERT INTO employees VALUES(135, 'Ki', 'Gee', 'KGEE', '650.127.1734',
'12.12.2007', 'ST_CLERK', 2400, NULL, 122, 50);
INSERT INTO employees VALUES(136, 'Hazel', 'Philtanker', 'HPHILTAN',
'650.127.1634', '06.02.2008', 'ST_CLERK', 2200, NULL, 122, 50);
INSERT INTO employees VALUES(137, 'Renske', 'Ladwig', 'RLADWIG',
'650.121.1234', '14.07.2003', 'ST_CLERK', 3600, NULL, 123, 50);
INSERT INTO employees VALUES(138, 'Stephen', 'Stiles', 'SSTILES',
'650.121.2034', '26.10.2005', 'ST_CLERK', 3200, NULL, 123, 50);
INSERT INTO employees VALUES(139, 'John', 'Seo', 'JSEO', '650.121.2019',
'12.02.2006', 'ST_CLERK', 2700, NULL, 123, 50);
INSERT INTO employees VALUES(140, 'Joshua', 'Patel', 'JPATEL',
'650.121.1834', '06.04.2006', 'ST_CLERK', 2500, NULL, 123, 50);
INSERT INTO employees VALUES(141, 'Trenna', 'Rajs', 'TRAJS',
'650.121.8009', '17.10.2003', 'ST_CLERK', 3500, NULL, 124, 50);
INSERT INTO employees VALUES(142, 'Curtis', 'Davies', 'CDAVIES',
'650.121.2994', '29.01.2005', 'ST_CLERK', 3100, NULL, 124, 50);
INSERT INTO employees VALUES(143, 'Randall', 'Matos', 'RMATOS',
'650.121.2874', '15.03.2006', 'ST_CLERK', 2600, NULL, 124, 50);
INSERT INTO employees VALUES(144, 'Peter', 'Vargas', 'PVARGAS',
'650.121.2004', '09.07.2006', 'ST_CLERK', 2500, NULL, 124, 50);
INSERT INTO employees VALUES(145, 'John', 'Russell', 'JRUSSEL',
'011.44.1344.429268', '01.10.2004', 'SA_MAN', 14000, '0.4', 100, 80);
INSERT INTO employees VALUES(146, 'Karen', 'Partners', 'KPARTNER',
'011.44.1344.467268', '05.01.2005', 'SA_MAN', 13500, '0.3', 100, 80);
INSERT INTO employees VALUES(147, 'Alberto', 'Errazuriz', 'AERRAZUR',
'011.44.1344.429278', '10.03.2005', 'SA_MAN', 12000, '0.3', 100, 80);
INSERT INTO employees VALUES(148, 'Gerald', 'Cambrault', 'GCAMBRAU',
'011.44.1344.619268', '15.10.2007', 'SA_MAN', 11000, '0.3', 100, 80);
INSERT INTO employees VALUES(149, 'Eleni', 'Zlotkey', 'EZLOTKEY',
'011.44.1344.429018', '29.01.2008', 'SA_MAN', 10500, '0.2', 100, 80);
INSERT INTO employees VALUES(150, 'Peter', 'Tucker', 'PTUCKER',
'011.44.1344.129268', '30.01.2005', 'SA_REP', 10000, '0.3', 145, 80);
INSERT INTO employees VALUES(151, 'David', 'Bernstein', 'DBERNSTE',
'011.44.1344.345268', '24.03.2005', 'SA_REP', 9500, '0.25', 145, 80);
INSERT INTO employees VALUES(152, 'Peter', 'Hall', 'PHALL',
'011.44.1344.478968', '20.08.2005', 'SA_REP', 9000, '0.25', 145, 80);
INSERT INTO employees VALUES(153, 'Christopher', 'Olsen', 'COLSEN',
'011.44.1344.498718', '30.03.2006', 'SA_REP', 8000, '0.2', 145, 80);
INSERT INTO employees VALUES(154, 'Nanette', 'Cambrault', 'NCAMBRAU',

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'011.44.1344.987668', '09.12.2006', 'SA_REP', 7500, '0.2', 145, 80);
INSERT INTO employees VALUES(155, 'Oliver', 'Tuvault', 'OTUVAULT',
'011.44.1344.486508', '23.11.2007', 'SA_REP', 7000, '0.15', 145, 80);
INSERT INTO employees VALUES(156, 'Janette', 'King', 'JKING',
'011.44.1345.429268', '30.01.2004', 'SA_REP', 10000, '0.35', 146, 80);
INSERT INTO employees VALUES(157, 'Patrick', 'Sully', 'PSULLY',
'011.44.1345.929268', '04.03.2004', 'SA_REP', 9500, '0.35', 146, 80);
INSERT INTO employees VALUES(158, 'Allan', 'McEwen', 'AMCEWEN',
'011.44.1345.829268', '01.08.2004', 'SA_REP', 9000, '0.35', 146, 80);
INSERT INTO employees VALUES(159, 'Lindsey', 'Smith', 'LSMITH',
'011.44.1345.729268', '10.03.2005', 'SA_REP', 8000, '0.3', 146, 80);
INSERT INTO employees VALUES(160, 'Louise', 'Doran', 'LDORAN',
'011.44.1345.629268', '15.12.2005', 'SA_REP', 7500, '0.3', 146, 80);
INSERT INTO employees VALUES(161, 'Sarath', 'Sewall', 'SSEWALL',
'011.44.1345.529268', '03.11.2006', 'SA_REP', 7000, '0.25', 146, 80);
INSERT INTO employees VALUES(162, 'Clara', 'Vishney', 'CVISHNEY',
'011.44.1346.129268', '11.11.2005', 'SA_REP', 10500, '0.25', 147, 80);
INSERT INTO employees VALUES(163, 'Danielle', 'Greene', 'DGREENE',
'011.44.1346.229268', '19.03.2007', 'SA_REP', 9500, '0.15', 147, 80);
INSERT INTO employees VALUES(164, 'Mattea', 'Marvins', 'MMARVINS',
'011.44.1346.329268', '24.01.2008', 'SA_REP', 7200, '0.1', 147, 80);
INSERT INTO employees VALUES(165, 'David', 'Lee', 'DLEE',
'011.44.1346.529268', '23.02.2008', 'SA_REP', 6800, '0.1', 147, 80);
INSERT INTO employees VALUES(166, 'Sundar', 'Ande', 'SANDE',
'011.44.1346.629268', '24.03.2008', 'SA_REP', 6400, '0.1', 147, 80);
INSERT INTO employees VALUES(167, 'Amit', 'Banda', 'ABANDA',
'011.44.1346.729268', '21.04.2008', 'SA_REP', 6200, '0.1', 147, 80);
INSERT INTO employees VALUES(168, 'Lisa', 'Ozer', 'LOZER',
'011.44.1343.929268', '11.03.2005', 'SA_REP', 11500, '0.25', 148, 80);
INSERT INTO employees VALUES(169, 'Harrison', 'Bloom', 'HBLOOM',
'011.44.1343.829268', '23.03.2006', 'SA_REP', 10000, '0.2', 148, 80);
INSERT INTO employees VALUES(170, 'Tayler', 'Fox', 'TFOX',
'011.44.1343.729268', '24.01.2006', 'SA_REP', 9600, '0.2', 148, 80);
INSERT INTO employees VALUES(171, 'William', 'Smith', 'WSMITH',
'011.44.1343.629268', '23.02.2007', 'SA_REP', 7400, '0.15', 148, 80);
INSERT INTO employees VALUES(172, 'Elizabeth', 'Bates', 'EBATES',
'011.44.1343.529268', '24.03.2007', 'SA_REP', 7300, '0.15', 148, 80);
INSERT INTO employees VALUES(173, 'Sundita', 'Kumar', 'SKUMAR',
'011.44.1343.329268', '21.04.2008', 'SA_REP', 6100, '0.1', 148, 80);
INSERT INTO employees VALUES(174, 'Ellen', 'Abel', 'EABEL',
'011.44.1644.429267', '11.05.2004', 'SA_REP', 11000, '0.3', 149, 80);
INSERT INTO employees VALUES(175, 'Alyssa', 'Hutton', 'AHUTTON',
'011.44.1644.429266', '19.03.2005', 'SA_REP', 8800, '0.25', 149, 80);
INSERT INTO employees VALUES(176, 'Jonathon', 'Taylor', 'JTAYLOR',
'011.44.1644.429265', '24.03.2006', 'SA_REP', 8600, '0.2', 149, 80);
INSERT INTO employees VALUES(177, 'Jack', 'Livingston', 'JLIVINGS',
'011.44.1644.429264', '23.04.2006', 'SA_REP', 8400, '0.2', 149, 80);
INSERT INTO employees VALUES(178, 'Kimberely', 'Grant', 'KGRANT',
'011.44.1644.429263', '24.05.2007', 'SA_REP', 7000, '0.15', 149, NULL);

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INSERT INTO employees VALUES(179, 'Charles', 'Johnson', 'CJOHNSON',
'011.44.1644.429262', '04.01.2008', 'SA_REP', 6200, '0.1', 149, 80);
INSERT INTO employees VALUES(180, 'Winston', 'Taylor', 'WTAYLOR',
'650.507.9876', '24.01.2006', 'SH_CLERK', 3200, NULL, 120, 50);
INSERT INTO employees VALUES(181, 'Jean', 'Fleaur', 'JFLEAUR',
'650.507.9877', '23.02.2006', 'SH_CLERK', 3100, NULL, 120, 50);
INSERT INTO employees VALUES(182, 'Martha', 'Sullivan', 'MSULLIVA',
'650.507.9878', '21.06.2007', 'SH_CLERK', 2500, NULL, 120, 50);
INSERT INTO employees VALUES(183, 'Girard', 'Geoni', 'GGEONI',
'650.507.9879', '03.02.2008', 'SH_CLERK', 2800, NULL, 120, 50);
INSERT INTO employees VALUES(184, 'Nandita', 'Sarchand', 'NSARCHAN',
'650.509.1876', '27.01.2004', 'SH_CLERK', 4200, NULL, 121, 50);
INSERT INTO employees VALUES(185, 'Alexis', 'Bull', 'ABULL',
'650.509.2876', '20.02.2005', 'SH_CLERK', 4100, NULL, 121, 50);
INSERT INTO employees VALUES(186, 'Julia', 'Dellinger', 'JDELLING',
'650.509.3876', '24.06.2006', 'SH_CLERK', 3400, NULL, 121, 50);
INSERT INTO employees VALUES(187, 'Anthony', 'Cabrio', 'ACABRIO',
'650.509.4876', '07.02.2007', 'SH_CLERK', 3000, NULL, 121, 50);
INSERT INTO employees VALUES(188, 'Kelly', 'Chung', 'KCHUNG',
'650.505.1876', '14.06.2005', 'SH_CLERK', 3800, NULL, 122, 50);
INSERT INTO employees VALUES(189, 'Jennifer', 'Dilly', 'JDILLY',
'650.505.2876', '13.08.2005', 'SH_CLERK', 3600, NULL, 122, 50);
INSERT INTO employees VALUES(190, 'Timothy', 'Gates', 'TGATES',
'650.505.3876', '11.07.2006', 'SH_CLERK', 2900, NULL, 122, 50);
INSERT INTO employees VALUES(191, 'Randall', 'Perkins', 'RPERKINS',
'650.505.4876', '19.12.2007', 'SH_CLERK', 2500, NULL, 122, 50);
INSERT INTO employees VALUES(192, 'Sarah', 'Bell', 'SBELL',
'650.501.1876', '04.02.2004', 'SH_CLERK', 4000, NULL, 123, 50);
INSERT INTO employees VALUES(193, 'Britney', 'Everett', 'BEVERETT',
'650.501.2876', '03.03.2005', 'SH_CLERK', 3900, NULL, 123, 50);
INSERT INTO employees VALUES(194, 'Samuel', 'McCain', 'SMCCAIN',
'650.501.3876', '01.07.2006', 'SH_CLERK', 3200, NULL, 123, 50);
INSERT INTO employees VALUES(195, 'Vance', 'Jones', 'VJONES',
'650.501.4876', '17.03.2007', 'SH_CLERK', 2800, NULL, 123, 50);
INSERT INTO employees VALUES(196, 'Alana', 'Walsh', 'AWALSH',
'650.507.9811', '24.04.2006', 'SH_CLERK', 3100, NULL, 124, 50);
INSERT INTO employees VALUES(197, 'Kevin', 'Feeney', 'KFEENEY',
'650.507.9822', '23.05.2006', 'SH_CLERK', 3000, NULL, 124, 50);
INSERT INTO employees VALUES(198, 'Donald', 'OConnell', 'DOCONNEL',
'650.507.9833', '21.06.2007', 'SH_CLERK', 2600, NULL, 124, 50);
INSERT INTO employees VALUES(199, 'Douglas', 'Grant', 'DGRANT',
'650.507.9844', '13.01.2008', 'SH_CLERK', 2600, NULL, 124, 50);
INSERT INTO employees VALUES(200, 'Jennifer', 'Whalen', 'JWHALEN',
'515.123.4444', '17.09.2003', 'AD_ASST', 4400, NULL, 101, 10);
INSERT INTO employees VALUES(201, 'Michael', 'Hartstein', 'MHARTSTE',
'515.123.5555', '17.02.2004', 'MK_MAN', 13000, NULL, 100, 20);
INSERT INTO employees VALUES(202, 'Pat', 'Fay', 'PFAY', '603.123.6666',
'17.08.2005', 'MK_REP', 6000, NULL, 201, 20);
INSERT INTO employees VALUES(203, 'Susan', 'Mavris', 'SMAVRIS',
```



```
'515.123.7777', '07.06.2002', 'HR_REP', 6500, NULL, 101, 40);
INSERT INTO employees VALUES(204, 'Hermann', 'Baer', 'HBAER',
'515.123.8888', '07.06.2002', 'PR_REP', 10000, NULL, 101, 70);
INSERT INTO employees VALUES(205, 'Shelley', 'Higgins', 'SHIGGINS',
'515.123.8080', '07.06.2002', 'AC_MGR', 12008, NULL, 101, 110);
INSERT INTO employees VALUES(206, 'William', 'Gietz', 'WGIETZ',
'515.123.8181', '07.06.2002', 'AC_ACCOUNT', 8300, NULL, 205, 110);
```

```
CREATE TABLE DEPARTMENTS
```

```
(
    department_id integer PRIMARY KEY,
    department_name varchar(64) NOT NULL UNIQUE,
    manager_id integer REFERENCES EMPLOYEES(employee_id),
    location_id integer REFERENCES LOCATIONS(location_id)
);
```

```
INSERT INTO departments VALUES
```

```
(10, 'Administration', 200, 1700),
(20, 'Marketing', 201, 1800),
(30, 'Purchasing', 114, 1700),
(40, 'Human Resources', 203, 2400),
(50, 'Shipping', 121, 1500),
(60, 'IT', 103, 1400),
(70, 'Public Relations', 204, 2700),
(80, 'Sales', 145, 2500),
(90, 'Executive', 100, 1700),
(100, 'Finance', 108, 1700),
(110, 'Accounting', 205, 1700),
(120, 'Treasury', NULL, 1700),
(130, 'Corporate Tax', NULL, 1700),
(140, 'Control And Credit', NULL, 1700),
(150, 'Shareholder Services', NULL, 1700),
(160, 'Benefits', NULL, 1700),
(170, 'Manufacturing', NULL, 1700),
(180, 'Construction', NULL, 1700),
(190, 'Contracting', NULL, 1700),
(200, 'Operations', NULL, 1700),
(210, 'IT Support', NULL, 1700),
(220, 'NOC', NULL, 1700),
(230, 'IT Helpdesk', NULL, 1700),
(240, 'Government Sales', NULL, 1700),
(250, 'Retail Sales', NULL, 1700),
(260, 'Recruiting', NULL, 1700),
(270, 'Payroll', NULL, 1700);
```

```
ALTER TABLE EMPLOYEES ADD CONSTRAINT DE FOREIGN KEY(department_id)
REFERENCES DEPARTMENTS(department_id);
```

```
CREATE TABLE JOB_HISTORY
```

```
(
  employee_id integer REFERENCES EMPLOYEES(employee_id),
  start_date timestamp,
  PRIMARY KEY(employee_id, start_date),
  end_date timestamp,
  job_id varchar(16) REFERENCES JOBS(job_id) NOT NULL,
  department_id integer REFERENCES DEPARTMENTS(department_id) NOT NULL
);
```

```
INSERT INTO job_history VALUES
(102, '13.01.2001', '24.07.2006', 'IT_PROG', 60),
(101, '21.09.1997', '27.10.2001', 'AC_ACCOUNT', 110),
(101, '28.10.2001', '15.03.2005', 'AC_MGR', 110),
(201, '17.02.2004', '19.12.2007', 'MK_REP', 20),
(114, '24.03.2006', '31.12.2007', 'ST_CLERK', 50),
(122, '01.01.2007', '31.12.2007', 'ST_CLERK', 50),
(200, '17.09.1995', '17.06.2001', 'AD_ASST', 90),
(176, '24.03.2006', '31.12.2006', 'SA_REP', 80),
(176, '01.01.2007', '31.12.2007', 'SA_MAN', 80),
(200, '01.07.2002', '31.12.2006', 'AC_ACCOUNT', 90);
```

--1

```
SELECT (first_name || ' ' || last_name) AS "ФИО"
, REPLACE(to_char(salary,'99999.99'),'.','') AS "Оклад"
, REPLACE(to_char(trunc(salary * 0.87, 0),'99999'),'.','') AS "Оклад
минус подоходный"
FROM employees;
```

--2

```
SELECT first_name as Имя, last_name as Фамилия, job_id as Должность,
date(hire_date) as "Дата приема на работу"
FROM employees WHERE (hire_date BETWEEN '01.01.1995' AND '31.12.1999')
OR (job_id IN ('AD_PRES','AD_VP','AD_ASST')) LIMIT 5;
```

--3

```
SELECT First_name Имя, Last_name Фамилия,
REPLACE(to_char(salary,'99999.99'),'.','') Оклад, date(hire_date) as
"Дата приема на работу",
(EXTRACT(year FROM age(now(),hire_date))*12 + EXTRACT(month FROM
age(now(),hire_date))) as "Проработано месяцев"
FROM employees;
```

--4

```
SELECT job_id "Должность" ,
REPLACE(to_char(trunc(max(salary),0),'99999'),'.','') "Максимальная
зарплата",
REPLACE(to_char(trunc(min(salary),0),'99999'),'.','') "Минимальная
```

```
зарплата",  
trunc(avg(salary),2) "Средняя зарплата" FROM employees GROUP BY job_id;
```

Вариант 3 лаб 3

```
SET DateStyle TO German;  
  
DROP TABLE IF EXISTS JOB_HISTORY;  
DROP TABLE IF EXISTS DEPARTMENTS CASCADE;  
DROP TABLE IF EXISTS EMPLOYEES;  
DROP TABLE IF EXISTS JOBS;  
DROP TABLE IF EXISTS LOCATIONS;  
DROP TABLE IF EXISTS COUNTRIES;  
DROP TABLE IF EXISTS REGIONS;  
  
CREATE TABLE REGIONS  
(  
    region_id integer PRIMARY KEY,  
    region_name varchar(64) NOT NULL UNIQUE  
);  
  
INSERT INTO regions  
VALUES(1, 'Europe '),  
(2, 'Americas '),  
(3, 'Asia '),  
(4, 'Middle East and Africa ');  
-- DELETE FROM COUNTRIES;  
  
CREATE TABLE COUNTRIES  
(  
    country_id varchar(2) PRIMARY KEY,  
    country_name varchar(64) NOT NULL UNIQUE,  
    region_id integer REFERENCES REGIONS(region_id) NOT NULL  
);  
  
INSERT INTO COUNTRIES VALUES  
( 'AR', 'Argentina', 2),  
( 'AU', 'Australia', 3),  
( 'BE', 'Belgium', 1),  
( 'BR', 'Brazil', 2),  
( 'CA', 'Canada', 2),  
( 'CH', 'Switzerland', 1),  
( 'CN', 'China', 3),  
( 'DE', 'Germany', 1),  
( 'DK', 'Denmark', 1),  
( 'EG', 'Egypt', 4),  
( 'FR', 'France', 1),  
( 'IL', 'Israel', 4),
```

```

('IN', 'India', 3),
('IT', 'Italy', 1),
('JP', 'Japan', 3),
('KW', 'Kuwait', 4),
('ML', 'Malaysia', 3),
('MX', 'Mexico', 2),
('NG', 'Nigeria', 4),
('NL', 'Netherlands', 1),
('SG', 'Singapore', 3),
('UK', 'United Kingdom', 1),
('US', 'United States of America', 2),
('ZM', 'Zambia', 4),
('ZW', 'Zimbabwe', 4);
-- DELETE FROM LOCATIONS;

CREATE TABLE LOCATIONS
(
    location_id integer PRIMARY KEY,
    street_address varchar(64) NOT NULL,
    postal_code varchar(16),
    city varchar(64),
    state_province varchar(64),
    country_id varchar(2) REFERENCES COUNTRIES(country_id) NOT NULL
);

INSERT INTO LOCATIONS VALUES
(1000, '1297 Via Cola di Rie', '989', 'Roma', '', 'IT'),
(1100, '93091 Calle della Testa', '10934', 'Venice', '', 'IT'),
(1200, '2017 Shinjuku-ku', '1689', 'Tokyo', 'Tokyo Prefecture', 'JP'),
(1300, '9450 Kamiya-cho', '6823', 'Hiroshima', '', 'JP'),
(1400, '2014 Jabberwocky Rd', '26192', 'Southlake', 'Texas', 'US'),
(1500, '2011 Interiors Blvd', '99236', 'South San Francisco',
'California', 'US'),
(1600, '2007 Zagora St', '50090', 'South Brunswick', 'New Jersey', 'US'),
(1700, '2004 Charade Rd', '98199', 'Seattle', 'Washington', 'US'),
(1800, '147 Spadina Ave', 'M5V 2L7', 'Toronto', 'Ontario', 'CA'),
(1900, '6092 Boxwood St', 'YSW 9T2', 'Whitehorse', 'Yukon', 'CA'),
(2000, '40-5-12 Laogianggen', '190518', 'Beijing', '', 'CN'),
(2100, '1298 Vileparle (E)', '490231', 'Bombay', 'Maharashtra', 'IN'),
(2200, '12-98 Victoria Street', '2901', 'Sydney', 'New South Wales',
'AU'),
(2300, '198 Clementi North', '540198', 'Singapore', '', 'SG'),
(2400, '8204 Arthur St', '', 'London', '', 'UK'),
(2500, 'Magdalen Centre, The Oxford Science Park', 'OX9 9ZB', 'Oxford',
'Oxford', 'UK'),
(2600, '9702 Chester Road', '9629850293', 'Stretford', 'Manchester',
'UK'),
(2700, 'Schwanthalerstr. 7031', '80925', 'Munich', 'Bavaria', 'DE'),
(2800, 'Rua Frei Caneca 1360 ', '01307-002', 'Sao Paulo', 'Sao Paulo',

```

```

'BR'),
(2900, '20 Rue des Corps-Saints', '1730', 'Geneva', 'Geneve', 'CH'),
(3000, 'Murtenstrasse 921', '3095', 'Bern', 'BE', 'CH'),
(3100, 'Pieter Breughelstraat 837', '3029SK', 'Utrecht', 'Utrecht',
'NL');
-- DELETE FROM JOBS;

CREATE TABLE JOBS(
  job_id varchar(16) PRIMARY KEY,
  job_title varchar(64) NOT NULL UNIQUE,
  min_salary numeric(8, 2) NOT NULL,
  max_salary numeric(8, 2) NOT NULL
);

INSERT INTO jobs VALUES
('AD_PRES', 'President', 20080, 40000),
('AD_VP', 'Administration Vice President', 15000, 30000),
('AD_ASST', 'Administration Assistant', 3000, 6000),
('FI_MGR', 'Finance Manager', 8200, 16000),
('FI_ACCOUNT', 'Accountant', 4200, 9000),
('AC_MGR', 'Accounting Manager', 8200, 16000),
('AC_ACCOUNT', 'Public Accountant', 4200, 9000),
('SA_MAN', 'Sales Manager', 10000, 20080),
('SA_REP', 'Sales Representative', 6000, 12008),
('PU_MAN', 'Purchasing Manager', 8000, 15000),
('PU_CLERK', 'Purchasing Clerk', 2500, 5500),
('ST_MAN', 'Stock Manager', 5500, 8500),
('ST_CLERK', 'Stock Clerk', 2008, 5000),
('SH_CLERK', 'Shipping Clerk', 2500, 5500),
('IT_PROG', 'Programmer', 4000, 10000),
('MK_MAN', 'Marketing Manager', 9000, 15000),
('MK_REP', 'Marketing Representative', 4000, 9000),
('HR_REP', 'Human Resources Representative', 4000, 9000),
('PR_REP', 'Public Relations Representative', 4500, 10500);
-- DELETE FROM DEPARTMENTS;

CREATE TABLE EMPLOYEES
(
  employee_id integer PRIMARY KEY,
  first_name varchar(64) NOT NULL,
  last_name varchar(64) NOT NULL,
  email varchar(64) NOT NULL UNIQUE,
  phone_integer varchar(64) NOT NULL,
  hire_date timestamp NOT NULL,
  job_id varchar(16) REFERENCES JOBS(job_id),
  salary numeric(8, 2) NOT NULL,
  commission_pct numeric(5, 2),
  manager_id integer REFERENCES EMPLOYEES(employee_id),
  department_id integer

```

```
);
```

```
-- DELETE FROM EMPLOYEES;
```

```
INSERT INTO employees VALUES(100, 'Steven', 'King', 'SKING',  
'515.123.4567', '17.06.2003', 'AD_PRES', 24000, NULL, NULL, 90);  
INSERT INTO employees VALUES(101, 'Neena', 'Kochhar', 'NKOCHHAR',  
'515.123.4568', '21.09.2005', 'AD_VP', 17000, NULL, 100, 90);  
INSERT INTO employees VALUES(102, 'Lex', 'De Haan', 'LDEHAAN',  
'515.123.4569', '13.01.2001', 'AD_VP', 17000, NULL, 100, 90);  
INSERT INTO employees VALUES(103, 'Alexander', 'Hunold', 'AHUNOLD',  
'590.423.4567', '03.01.2006', 'IT_PROG', 9000, NULL, 102, 60);  
INSERT INTO employees VALUES(104, 'Bruce', 'Ernst', 'BERNST',  
'590.423.4568', '21.05.2007', 'IT_PROG', 6000, NULL, 103, 60);  
INSERT INTO employees VALUES(105, 'David', 'Austin', 'DAUSTIN',  
'590.423.4569', '25.06.2005', 'IT_PROG', 4800, NULL, 103, 60);  
INSERT INTO employees VALUES(106, 'Valli', 'Pataballa', 'VPATABAL',  
'590.423.4560', '05.02.2006', 'IT_PROG', 4800, NULL, 103, 60);  
INSERT INTO employees VALUES(107, 'Diana', 'Lorentz', 'DLORENTZ',  
'590.423.5567', '07.02.2007', 'IT_PROG', 4200, NULL, 103, 60);  
INSERT INTO employees VALUES(108, 'Nancy', 'Greenberg', 'NGREENBE',  
'515.124.4569', '17.08.2002', 'FI_MGR', 12008, NULL, 101, 100);  
INSERT INTO employees VALUES(109, 'Daniel', 'Faviet', 'DFAVIET',  
'515.124.4169', '16.08.2002', 'FI_ACCOUNT', 9000, NULL, 108, 100);  
INSERT INTO employees VALUES(110, 'John', 'Chen', 'JCHEN',  
'515.124.4269', '28.09.2005', 'FI_ACCOUNT', 8200, NULL, 108, 100);  
INSERT INTO employees VALUES(111, 'Ismael', 'Sciarra', 'ISCIARRA',  
'515.124.4369', '30.09.2005', 'FI_ACCOUNT', 7700, NULL, 108, 100);  
INSERT INTO employees VALUES(112, 'Jose Manuel', 'Urman', 'JMURMAN',  
'515.124.4469', '07.03.2006', 'FI_ACCOUNT', 7800, NULL, 108, 100);  
INSERT INTO employees VALUES(113, 'Luis', 'Popp', 'LPOPP',  
'515.124.4567', '07.12.2007', 'FI_ACCOUNT', 6900, NULL, 108, 100);  
INSERT INTO employees VALUES(114, 'Den', 'Raphaely', 'DRAPHEAL',  
'515.127.4561', '07.12.2002', 'PU_MAN', 11000, NULL, 100, 30);  
INSERT INTO employees VALUES(115, 'Alexander', 'Khoo', 'AKHOO',  
'515.127.4562', '18.05.2003', 'PU_CLERK', 3100, NULL, 114, 30);  
INSERT INTO employees VALUES(116, 'Shelli', 'Baida', 'SBAIDA',  
'515.127.4563', '24.12.2005', 'PU_CLERK', 2900, NULL, 114, 30);  
INSERT INTO employees VALUES(117, 'Sigal', 'Tobias', 'STOBIAS',  
'515.127.4564', '24.07.2005', 'PU_CLERK', 2800, NULL, 114, 30);  
INSERT INTO employees VALUES(118, 'Guy', 'Himuro', 'GHIMURO',  
'515.127.4565', '15.11.2006', 'PU_CLERK', 2600, NULL, 114, 30);  
INSERT INTO employees VALUES(119, 'Karen', 'Colmenares', 'KCOLMENA',  
'515.127.4566', '10.08.2007', 'PU_CLERK', 2500, NULL, 114, 30);  
INSERT INTO employees VALUES(120, 'Matthew', 'Weiss', 'MWEISS',  
'650.123.1234', '18.07.2004', 'ST_MAN', 8000, NULL, 100, 50);  
INSERT INTO employees VALUES(121, 'Adam', 'Fripp', 'AFRIPP',  
'650.123.2234', '10.04.2005', 'ST_MAN', 8200, NULL, 100, 50);  
INSERT INTO employees VALUES(122, 'Payam', 'Kaufling', 'PKAUFLIN',  
'650.123.3234', '01.05.2003', 'ST_MAN', 7900, NULL, 100, 50);
```



```

INSERT INTO employees VALUES(123, 'Shanta', 'Vollman', 'SVOLLMAN',
'650.123.4234', '10.10.2005', 'ST_MAN', 6500, NULL, 100, 50);
INSERT INTO employees VALUES(124, 'Kevin', 'Mourgos', 'KMOURGOS',
'650.123.5234', '16.11.2007', 'ST_MAN', 5800, NULL, 100, 50);
INSERT INTO employees VALUES(125, 'Julia', 'Nayer', 'JNAYER',
'650.124.1214', '16.07.2005', 'ST_CLERK', 3200, NULL, 120, 50);
INSERT INTO employees VALUES(126, 'Irene', 'Mikkilineni', 'IMIKKILI',
'650.124.1224', '28.09.2006', 'ST_CLERK', 2700, NULL, 120, 50);
INSERT INTO employees VALUES(127, 'James', 'Landry', 'JLANDRY',
'650.124.1334', '14.01.2007', 'ST_CLERK', 2400, NULL, 120, 50);
INSERT INTO employees VALUES(128, 'Steven', 'Markle', 'SMARKLE',
'650.124.1434', '08.03.2008', 'ST_CLERK', 2200, NULL, 120, 50);
INSERT INTO employees VALUES(129, 'Laura', 'Bissot', 'LBISSOT',
'650.124.5234', '20.08.2005', 'ST_CLERK', 3300, NULL, 121, 50);
INSERT INTO employees VALUES(130, 'Mozhe', 'Atkinson', 'MATKINSO',
'650.124.6234', '30.10.2005', 'ST_CLERK', 2800, NULL, 121, 50);
INSERT INTO employees VALUES(131, 'James', 'Marlow', 'JAMLOW',
'650.124.7234', '16.02.2005', 'ST_CLERK', 2500, NULL, 121, 50);
INSERT INTO employees VALUES(132, 'TJ', 'Olson', 'TJOLSON',
'650.124.8234', '10.04.2007', 'ST_CLERK', 2100, NULL, 121, 50);
INSERT INTO employees VALUES(133, 'Jason', 'Mallin', 'JMALLIN',
'650.127.1934', '14.06.2004', 'ST_CLERK', 3300, NULL, 122, 50);
INSERT INTO employees VALUES(134, 'Michael', 'Rogers', 'MROGERS',
'650.127.1834', '26.08.2006', 'ST_CLERK', 2900, NULL, 122, 50);
INSERT INTO employees VALUES(135, 'Ki', 'Gee', 'KGEE', '650.127.1734',
'12.12.2007', 'ST_CLERK', 2400, NULL, 122, 50);
INSERT INTO employees VALUES(136, 'Hazel', 'Philtanker', 'HPHILTAN',
'650.127.1634', '06.02.2008', 'ST_CLERK', 2200, NULL, 122, 50);
INSERT INTO employees VALUES(137, 'Renske', 'Ladwig', 'RLADWIG',
'650.121.1234', '14.07.2003', 'ST_CLERK', 3600, NULL, 123, 50);
INSERT INTO employees VALUES(138, 'Stephen', 'Stiles', 'SSTILES',
'650.121.2034', '26.10.2005', 'ST_CLERK', 3200, NULL, 123, 50);
INSERT INTO employees VALUES(139, 'John', 'Seo', 'JSEO', '650.121.2019',
'12.02.2006', 'ST_CLERK', 2700, NULL, 123, 50);
INSERT INTO employees VALUES(140, 'Joshua', 'Patel', 'JPATEL',
'650.121.1834', '06.04.2006', 'ST_CLERK', 2500, NULL, 123, 50);
INSERT INTO employees VALUES(141, 'Trenna', 'Rajs', 'TRAJS',
'650.121.8009', '17.10.2003', 'ST_CLERK', 3500, NULL, 124, 50);
INSERT INTO employees VALUES(142, 'Curtis', 'Davies', 'CDAVIES',
'650.121.2994', '29.01.2005', 'ST_CLERK', 3100, NULL, 124, 50);
INSERT INTO employees VALUES(143, 'Randall', 'Matos', 'RMATOS',
'650.121.2874', '15.03.2006', 'ST_CLERK', 2600, NULL, 124, 50);
INSERT INTO employees VALUES(144, 'Peter', 'Vargas', 'PVARGAS',
'650.121.2004', '09.07.2006', 'ST_CLERK', 2500, NULL, 124, 50);
INSERT INTO employees VALUES(145, 'John', 'Russell', 'JRUSSEL',
'011.44.1344.429268', '01.10.2004', 'SA_MAN', 14000, '0.4', 100, 80);
INSERT INTO employees VALUES(146, 'Karen', 'Partners', 'KPARTNER',
'011.44.1344.467268', '05.01.2005', 'SA_MAN', 13500, '0.3', 100, 80);
INSERT INTO employees VALUES(147, 'Alberto', 'Errazuriz', 'AERRAZUR',

```

```

'011.44.1344.429278', '10.03.2005', 'SA_MAN', 12000, '0.3', 100, 80);
INSERT INTO employees VALUES(148, 'Gerald', 'Cambrault', 'GCAMBRAU',
'011.44.1344.619268', '15.10.2007', 'SA_MAN', 11000, '0.3', 100, 80);
INSERT INTO employees VALUES(149, 'Eleni', 'Zlotkey', 'EZLOTKEY',
'011.44.1344.429018', '29.01.2008', 'SA_MAN', 10500, '0.2', 100, 80);
INSERT INTO employees VALUES(150, 'Peter', 'Tucker', 'PTUCKER',
'011.44.1344.129268', '30.01.2005', 'SA_REP', 10000, '0.3', 145, 80);
INSERT INTO employees VALUES(151, 'David', 'Bernstein', 'DBERNSTE',
'011.44.1344.345268', '24.03.2005', 'SA_REP', 9500, '0.25', 145, 80);
INSERT INTO employees VALUES(152, 'Peter', 'Hall', 'PHALL',
'011.44.1344.478968', '20.08.2005', 'SA_REP', 9000, '0.25', 145, 80);
INSERT INTO employees VALUES(153, 'Christopher', 'Olsen', 'COLSEN',
'011.44.1344.498718', '30.03.2006', 'SA_REP', 8000, '0.2', 145, 80);
INSERT INTO employees VALUES(154, 'Nanette', 'Cambrault', 'NCAMBRAU',
'011.44.1344.987668', '09.12.2006', 'SA_REP', 7500, '0.2', 145, 80);
INSERT INTO employees VALUES(155, 'Oliver', 'Tuvault', 'OTUVAULT',
'011.44.1344.486508', '23.11.2007', 'SA_REP', 7000, '0.15', 145, 80);
INSERT INTO employees VALUES(156, 'Janette', 'King', 'JKING',
'011.44.1345.429268', '30.01.2004', 'SA_REP', 10000, '0.35', 146, 80);
INSERT INTO employees VALUES(157, 'Patrick', 'Sully', 'PSULLY',
'011.44.1345.929268', '04.03.2004', 'SA_REP', 9500, '0.35', 146, 80);
INSERT INTO employees VALUES(158, 'Allan', 'McEwen', 'AMCEWEN',
'011.44.1345.829268', '01.08.2004', 'SA_REP', 9000, '0.35', 146, 80);
INSERT INTO employees VALUES(159, 'Lindsey', 'Smith', 'LSMITH',
'011.44.1345.729268', '10.03.2005', 'SA_REP', 8000, '0.3', 146, 80);
INSERT INTO employees VALUES(160, 'Louise', 'Doran', 'LDORAN',
'011.44.1345.629268', '15.12.2005', 'SA_REP', 7500, '0.3', 146, 80);
INSERT INTO employees VALUES(161, 'Sarath', 'Sewall', 'SSEWALL',
'011.44.1345.529268', '03.11.2006', 'SA_REP', 7000, '0.25', 146, 80);
INSERT INTO employees VALUES(162, 'Clara', 'Vishney', 'CVISHNEY',
'011.44.1346.129268', '11.11.2005', 'SA_REP', 10500, '0.25', 147, 80);
INSERT INTO employees VALUES(163, 'Danielle', 'Greene', 'DGREENE',
'011.44.1346.229268', '19.03.2007', 'SA_REP', 9500, '0.15', 147, 80);
INSERT INTO employees VALUES(164, 'Mattea', 'Marvins', 'MMARVINS',
'011.44.1346.329268', '24.01.2008', 'SA_REP', 7200, '0.1', 147, 80);
INSERT INTO employees VALUES(165, 'David', 'Lee', 'DLEE',
'011.44.1346.529268', '23.02.2008', 'SA_REP', 6800, '0.1', 147, 80);
INSERT INTO employees VALUES(166, 'Sundar', 'Ande', 'SANDE',
'011.44.1346.629268', '24.03.2008', 'SA_REP', 6400, '0.1', 147, 80);
INSERT INTO employees VALUES(167, 'Amit', 'Banda', 'ABANDA',
'011.44.1346.729268', '21.04.2008', 'SA_REP', 6200, '0.1', 147, 80);
INSERT INTO employees VALUES(168, 'Lisa', 'Ozer', 'LOZER',
'011.44.1343.929268', '11.03.2005', 'SA_REP', 11500, '0.25', 148, 80);
INSERT INTO employees VALUES(169, 'Harrison', 'Bloom', 'HBLOOM',
'011.44.1343.829268', '23.03.2006', 'SA_REP', 10000, '0.2', 148, 80);
INSERT INTO employees VALUES(170, 'Tayler', 'Fox', 'TFOX',
'011.44.1343.729268', '24.01.2006', 'SA_REP', 9600, '0.2', 148, 80);
INSERT INTO employees VALUES(171, 'William', 'Smith', 'WSMITH',
'011.44.1343.629268', '23.02.2007', 'SA_REP', 7400, '0.15', 148, 80);

```

```
INSERT INTO employees VALUES(172, 'Elizabeth', 'Bates', 'EBATES',
'011.44.1343.529268', '24.03.2007', 'SA_REP', 7300, '0.15', 148, 80);
INSERT INTO employees VALUES(173, 'Sundita', 'Kumar', 'SKUMAR',
'011.44.1343.329268', '21.04.2008', 'SA_REP', 6100, '0.1', 148, 80);
INSERT INTO employees VALUES(174, 'Ellen', 'Abel', 'EABEL',
'011.44.1644.429267', '11.05.2004', 'SA_REP', 11000, '0.3', 149, 80);
INSERT INTO employees VALUES(175, 'Alyssa', 'Hutton', 'AHUTTON',
'011.44.1644.429266', '19.03.2005', 'SA_REP', 8800, '0.25', 149, 80);
INSERT INTO employees VALUES(176, 'Jonathon', 'Taylor', 'JTAYLOR',
'011.44.1644.429265', '24.03.2006', 'SA_REP', 8600, '0.2', 149, 80);
INSERT INTO employees VALUES(177, 'Jack', 'Livingston', 'JLIVINGS',
'011.44.1644.429264', '23.04.2006', 'SA_REP', 8400, '0.2', 149, 80);
INSERT INTO employees VALUES(178, 'Kimberely', 'Grant', 'KGRANT',
'011.44.1644.429263', '24.05.2007', 'SA_REP', 7000, '0.15', 149, NULL);
INSERT INTO employees VALUES(179, 'Charles', 'Johnson', 'CJOHNSON',
'011.44.1644.429262', '04.01.2008', 'SA_REP', 6200, '0.1', 149, 80);
INSERT INTO employees VALUES(180, 'Winston', 'Taylor', 'WTAYLOR',
'650.507.9876', '24.01.2006', 'SH_CLERK', 3200, NULL, 120, 50);
INSERT INTO employees VALUES(181, 'Jean', 'Fleur', 'JFLEUR',
'650.507.9877', '23.02.2006', 'SH_CLERK', 3100, NULL, 120, 50);
INSERT INTO employees VALUES(182, 'Martha', 'Sullivan', 'MSULLIVA',
'650.507.9878', '21.06.2007', 'SH_CLERK', 2500, NULL, 120, 50);
INSERT INTO employees VALUES(183, 'Girard', 'Geoni', 'GGEONI',
'650.507.9879', '03.02.2008', 'SH_CLERK', 2800, NULL, 120, 50);
INSERT INTO employees VALUES(184, 'Nandita', 'Sarchand', 'NSARCHAN',
'650.509.1876', '27.01.2004', 'SH_CLERK', 4200, NULL, 121, 50);
INSERT INTO employees VALUES(185, 'Alexis', 'Bull', 'ABULL',
'650.509.2876', '20.02.2005', 'SH_CLERK', 4100, NULL, 121, 50);
INSERT INTO employees VALUES(186, 'Julia', 'Dellinger', 'JDELLING',
'650.509.3876', '24.06.2006', 'SH_CLERK', 3400, NULL, 121, 50);
INSERT INTO employees VALUES(187, 'Anthony', 'Cabrio', 'ACABRIO',
'650.509.4876', '07.02.2007', 'SH_CLERK', 3000, NULL, 121, 50);
INSERT INTO employees VALUES(188, 'Kelly', 'Chung', 'KCHUNG',
'650.505.1876', '14.06.2005', 'SH_CLERK', 3800, NULL, 122, 50);
INSERT INTO employees VALUES(189, 'Jennifer', 'Dilly', 'JDILLY',
'650.505.2876', '13.08.2005', 'SH_CLERK', 3600, NULL, 122, 50);
INSERT INTO employees VALUES(190, 'Timothy', 'Gates', 'TGATES',
'650.505.3876', '11.07.2006', 'SH_CLERK', 2900, NULL, 122, 50);
INSERT INTO employees VALUES(191, 'Randall', 'Perkins', 'RPERKINS',
'650.505.4876', '19.12.2007', 'SH_CLERK', 2500, NULL, 122, 50);
INSERT INTO employees VALUES(192, 'Sarah', 'Bell', 'SBELL',
'650.501.1876', '04.02.2004', 'SH_CLERK', 4000, NULL, 123, 50);
INSERT INTO employees VALUES(193, 'Britney', 'Everett', 'BEVERETT',
'650.501.2876', '03.03.2005', 'SH_CLERK', 3900, NULL, 123, 50);
INSERT INTO employees VALUES(194, 'Samuel', 'McCain', 'SMCCAIN',
'650.501.3876', '01.07.2006', 'SH_CLERK', 3200, NULL, 123, 50);
INSERT INTO employees VALUES(195, 'Vance', 'Jones', 'VJONES',
'650.501.4876', '17.03.2007', 'SH_CLERK', 2800, NULL, 123, 50);
INSERT INTO employees VALUES(196, 'Alana', 'Walsh', 'AWALSH',
```

```

'650.507.9811', '24.04.2006', 'SH_CLERK', 3100, NULL, 124, 50);
INSERT INTO employees VALUES(197, 'Kevin', 'Feeney', 'KFEENEY',
'650.507.9822', '23.05.2006', 'SH_CLERK', 3000, NULL, 124, 50);
INSERT INTO employees VALUES(198, 'Donald', 'OConnell', 'DOCONNEL',
'650.507.9833', '21.06.2007', 'SH_CLERK', 2600, NULL, 124, 50);
INSERT INTO employees VALUES(199, 'Douglas', 'Grant', 'DGRANT',
'650.507.9844', '13.01.2008', 'SH_CLERK', 2600, NULL, 124, 50);
INSERT INTO employees VALUES(200, 'Jennifer', 'Whalen', 'JWHALEN',
'515.123.4444', '17.09.2003', 'AD_ASST', 4400, NULL, 101, 10);
INSERT INTO employees VALUES(201, 'Michael', 'Hartstein', 'MHARTSTE',
'515.123.5555', '17.02.2004', 'MK_MAN', 13000, NULL, 100, 20);
INSERT INTO employees VALUES(202, 'Pat', 'Fay', 'PFAY', '603.123.6666',
'17.08.2005', 'MK_REP', 6000, NULL, 201, 20);
INSERT INTO employees VALUES(203, 'Susan', 'Mavris', 'SMAVRIS',
'515.123.7777', '07.06.2002', 'HR_REP', 6500, NULL, 101, 40);
INSERT INTO employees VALUES(204, 'Hermann', 'Baer', 'HBAER',
'515.123.8888', '07.06.2002', 'PR_REP', 10000, NULL, 101, 70);
INSERT INTO employees VALUES(205, 'Shelley', 'Higgins', 'SHIGGINS',
'515.123.8080', '07.06.2002', 'AC_MGR', 12008, NULL, 101, 110);
INSERT INTO employees VALUES(206, 'William', 'Gietz', 'WGIETZ',
'515.123.8181', '07.06.2002', 'AC_ACCOUNT', 8300, NULL, 205, 110);

```

```
CREATE TABLE DEPARTMENTS
```

```

(
    department_id integer PRIMARY KEY,
    department_name varchar(64) NOT NULL UNIQUE,
    manager_id integer REFERENCES EMPLOYEES(employee_id),
    location_id integer REFERENCES LOCATIONS(location_id)
);

```

```
INSERT INTO departments VALUES
```

```

(10, 'Administration', 200, 1700),
(20, 'Marketing', 201, 1800),
(30, 'Purchasing', 114, 1700),
(40, 'Human Resources', 203, 2400),
(50, 'Shipping', 121, 1500),
(60, 'IT', 103, 1400),
(70, 'Public Relations', 204, 2700),
(80, 'Sales', 145, 2500),
(90, 'Executive', 100, 1700),
(100, 'Finance', 108, 1700),
(110, 'Accounting', 205, 1700),
(120, 'Treasury', NULL, 1700),
(130, 'Corporate Tax', NULL, 1700),
(140, 'Control And Credit', NULL, 1700),
(150, 'Shareholder Services', NULL, 1700),
(160, 'Benefits', NULL, 1700),
(170, 'Manufacturing', NULL, 1700),
(180, 'Construction', NULL, 1700),

```

```

(190, 'Contracting', NULL, 1700),
(200, 'Operations', NULL, 1700),
(210, 'IT Support', NULL, 1700),
(220, 'NOC', NULL, 1700),
(230, 'IT Helpdesk', NULL, 1700),
(240, 'Government Sales', NULL, 1700),
(250, 'Retail Sales', NULL, 1700),
(260, 'Recruiting', NULL, 1700),
(270, 'Payroll', NULL, 1700);

ALTER TABLE EMPLOYEES ADD CONSTRAINT DE FOREIGN KEY(department_id)
REFERENCES DEPARTMENTS(department_id);

CREATE TABLE JOB_HISTORY
(
  employee_id integer REFERENCES EMPLOYEES(employee_id),
  start_date timestamp,
  PRIMARY KEY(employee_id, start_date),
  end_date timestamp,
  job_id varchar(16) REFERENCES JOBS(job_id) NOT NULL,
  department_id integer REFERENCES DEPARTMENTS(department_id) NOT NULL
);

```

```

INSERT INTO job_history VALUES
(102, '13.01.2001', '24.07.2006', 'IT_PROG', 60),
(101, '21.09.1997', '27.10.2001', 'AC_ACCOUNT', 110),
(101, '28.10.2001', '15.03.2005', 'AC_MGR', 110),
(201, '17.02.2004', '19.12.2007', 'MK_REP', 20),
(114, '24.03.2006', '31.12.2007', 'ST_CLERK', 50),
(122, '01.01.2007', '31.12.2007', 'ST_CLERK', 50),
(200, '17.09.1995', '17.06.2001', 'AD_ASST', 90),
(176, '24.03.2006', '31.12.2006', 'SA_REP', 80),
(176, '01.01.2007', '31.12.2007', 'SA_MAN', 80),
(200, '01.07.2002', '31.12.2006', 'AC_ACCOUNT', 90);

```

--1

```

SELECT country_id, country_name, region_name
FROM COUNTRIES c INNER JOIN REGIONS r ON r.region_id = c.region_id
WHERE (r.region_name in ('Asia ', 'Americas '));

```

--2

```

SELECT first_name, last_name, date(hire_date), job_title, street_address
FROM employees e JOIN DEPARTMENTS d ON e.department_id = d.department_id
JOIN locations l ON l.location_id = d.location_id
JOIN jobs j ON e.job_id = j.job_id WHERE EXTRACT(YEAR FROM hire_date) =
2007
ORDER BY hire_date ASC;

```

--3

```
SELECT first_name Имя, last_name Фамилия,  
REPLACE(to_char(e.salary, '99999.99'), '.', ',') Оклад ,  
j.min_salary as "Мин.оклад"  
FROM EMPLOYEES e INNER JOIN JOBS j ON e.job_id = j.job_id  
WHERE e.salary <= 1.2 * (trunc(j.min_salary,0)) and e.salary >= 0.8 *  
(trunc(j.min_salary,0));
```

--4

```
SELECT last_name AS "Фамилия_P", first_name AS "Имя",  
replace(to_char(trunc(salary,2), 'FM99999999D00'), '.', ',') AS "Оклад"  
FROM employees WHERE salary > (SELECT AVG(salary) FROM employees) ORDER BY  
salary;
```

--5

```
SELECT first_name Имя, last_name Фамилия, job_id, salary Оклад FROM  
employees e WHERE salary =  
(SELECT min_salary FROM Jobs WHERE Jobs.job_id = e.job_id)
```