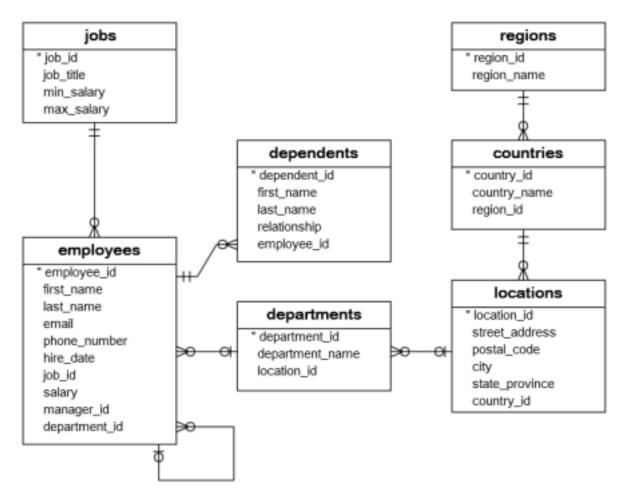
EXERCISE 1



The company database has seven tables:

- 1. The employees table stores the data of employees.
- 2. The jobs table stores the job data including job title and salary range.
- 3. The departments table stores department data.
- 4. The dependents table stores the employee's dependents.
- 5. The locations table stores the location of the departments of the company. 6. The countries table stores the data of countries where the company is doing business. 7. The regions table stores the data of regions such as Asia, Europe, America, and the Middle East and Africa. The countries are grouped into regions.

I. WRITE QUERIES IN MYSQL TO DO THE FOLLOWING:

DDL COMMANDS

- 1. Design and create database which consists of above seven tables.
- 2. Rename Departments table to Dept.
- 3. Modify Column Salary from int to smallint
- 4. Add Commission column to the Employees table.

DML COMMANDS

5. Enter following queries to insert values in Employees table.

```
(Note: Check the columns in the table before you insert data and do appropriate modifications)
```

```
/*Data for the table regions */
INSERT INTO regions (region id, region name) VALUES (1, 'Europe');
INSERT INTO regions(region_id,region_name) VALUES
(2,'Americas'); INSERT INTO regions(region_id,region_name)
VALUES (3,'Asia');
INSERT INTO regions (region id, region name) VALUES (4, 'Middle East and
Africa');
/*Data for the table countries */
INSERT INTO countries(country id,country name,region id) VALUES
('AR','Argentina',2);
INSERT INTO countries(country_id,country_name,region_id)
VALUES ('AU','Australia',3);
INSERT INTO countries(country id,country name,region id)
VALUES ('BE', 'Belgium', 1);
INSERT INTO countries(country id,country name,region id) VALUES
('BR', 'Brazil', 2);
INSERT INTO countries(country id,country name,region id)
VALUES ('CA', 'Canada', 2);
```

```
INSERT INTO countries(country_id,country_name,region_id)
VALUES ('CH','Switzerland',1);
INSERT INTO countries(country_id,country_name,region_id) VALUES
('CN','China',3);
INSERT INTO countries(country_id,country_name,region_id)
VALUES ('DE','Germany',1);
INSERT INTO countries(country_id,country_name,region_id)
VALUES ('DK','Denmark',1);
INSERT INTO countries(country_id,country_name,region_id) VALUES
('EG','Egypt',4);
INSERT INTO countries(country id,country name,region id)
VALUES ('FR','France',1);
INSERT INTO countries(country_id,country_name,region_id)
VALUES ('HK','HongKong',3);
INSERT INTO countries(country_id,country_name,region_id) VALUES
('IL','Israel',4);
INSERT INTO countries(country_id,country_name,region_id)
VALUES ('IN','India',3);
INSERT INTO countries(country_id,country_name,region_id)
VALUES ('IT','Italy',1);
INSERT INTO countries(country_id,country_name,region_id) VALUES
('JP','Japan',3);
INSERT INTO countries(country_id,country_name,region_id)
VALUES ('KW','Kuwait',4);
INSERT INTO countries(country_id,country_name,region_id)
VALUES ('MX','Mexico',2);
```

```
INSERT INTO countries(country_id,country_name,region_id)
VALUES ('NG','Nigeria',4);
INSERT INTO countries(country_id,country_name,region_id)
VALUES ('NL','Netherlands',1);
INSERT INTO countries(country_id,country_name,region_id)
VALUES ('SG','Singapore',3);
INSERT INTO countries(country_id,country_name,region_id)
VALUES ('UK','United Kingdom',1);
INSERT INTO countries(country_id,country_name,region_id)
VALUES ('US','United States of America',2);
INSERT INTO countries(country id,country name,region id) VALUES
('ZM','Zambia',4);
INSERT INTO countries(country_id,country_name,region_id)
VALUES ('ZW','Zimbabwe',4);
/*Data for the table locations */
INSERT INTO
locations(location id, street address, postal code, city, state province, country
_ id) VALUES (1400,'2014 Jabberwocky Rd','26192','Southlake','Texas','US');
INSERT INTO
locations(location id, street address, postal code, city, state province, country
_ id) VALUES (1500,'2011 Interiors Blvd','99236','South San
Francisco', 'California', 'US');
INSERT INTO
locations(location_id,street_address,postal_code,city,state_province,country
_ id) VALUES (1700,'2004 Charade Rd','98199','Seattle','Washington','US');
INSERT INTO
```

```
locations(location id, street address, postal code, city, state province, country
id) VALUES (1800, '147 Spadina Ave', 'M5V 2L7', 'Toronto', 'Ontario', 'CA');
INSERT INTO
locations(location id, street address, postal code, city, state province, country
_ id) VALUES (2400,'8204 Arthur St',NULL,'London',NULL,'UK');
INSERT INTO
locations(location id,street address,postal code,city,state province,country
_ id) VALUES (2500, 'Magdalen Centre, The Oxford Science Park', 'OX9
9ZB','Oxford','Oxford','UK');
INSERT INTO
locations(location id,street address,postal code,city,state province,country
_ id) VALUES (2700, 'Schwanthalerstr. 7031', '80925', 'Munich', 'Bavaria', 'DE');
/*Data for the table jobs */
INSERT INTO jobs(job id,job title,min salary,max salary) VALUES
(1,'Public Accountant',4200.00,9000.00);
INSERT INTO jobs(job id,job title,min salary,max salary)
VALUES (2,'Accounting Manager',8200.00,16000.00);
INSERT INTO jobs(job id,job title,min salary,max salary)
VALUES (3,'Administration Assistant',3000.00,6000.00);
INSERT INTO jobs(job id,job title,min salary,max salary)
VALUES (4, 'President', 20000.00, 40000.00);
INSERT INTO jobs(job id,job title,min salary,max salary)
VALUES (5,'Administration Vice President',15000.00,30000.00);
INSERT INTO jobs(job id,job title,min salary,max salary)
```

```
VALUES (6,'Accountant',4200.00,9000.00);
INSERT INTO jobs(job_id,job_title,min_salary,max_salary) VALUES
(7,'Finance Manager',8200.00,16000.00);
INSERT INTO jobs(job_id,job_title,min_salary,max_salary) VALUES
(8, Human Resources Representative', 4000.00, 9000.00);
INSERT INTO jobs(job_id,job_title,min_salary,max_salary)
VALUES (9,'Programmer',4000.00,10000.00);
INSERT INTO jobs(job id,job title,min salary,max salary)
VALUES (10, 'Marketing Manager', 9000.00, 15000.00);
INSERT INTO jobs(job id,job title,min salary,max salary)
VALUES (11, 'Marketing Representative', 4000.00, 9000.00);
INSERT INTO jobs(job id,job title,min salary,max salary) VALUES
(12, Public Relations Representative', 4500.00, 10500.00);
INSERT INTO jobs(job_id,job_title,min_salary,max_salary)
VALUES (13, 'Purchasing Clerk', 2500.00, 5500.00);
INSERT INTO jobs(job id,job title,min salary,max salary)
VALUES (14, 'Purchasing Manager', 8000.00, 15000.00);
INSERT INTO jobs(job id,job title,min salary,max salary) VALUES
(15, 'Sales Manager', 10000.00, 20000.00);
INSERT INTO jobs(job id,job title,min salary,max salary) VALUES
(16, 'Sales Representative', 6000.00, 12000.00);
INSERT INTO jobs(job id,job title,min salary,max salary)
VALUES (17, 'Shipping Clerk', 2500.00, 5500.00);
INSERT INTO jobs(job id,job title,min salary,max salary) VALUES
(18, 'Stock Clerk', 2000.00, 5000.00);
INSERT INTO jobs(job id,job title,min salary,max salary) VALUES
```

```
(19,'Stock Manager',5500.00,8500.00);

/*Data for the table departments */
```

departments(department_id,department_name,location_id) VALUES
(1,'Administration',1700);

INSERT INTO

departments(department_id,department_name,location_id) VALUES
(2,'Marketing',1800);

INSERT INTO

departments(department_id,department_name,location_id) VALUES
(3,'Purchasing',1700);

INSERT INTO

departments(department_id,department_name,location_id) VALUES
(4,'Human Resources',2400);

INSERT INTO

departments(department_id,department_name,location_id) VALUES
(5,'Shipping',1500);

INSERT INTO

departments(department_id,department_name,location_id) VALUES
(6,'IT',1400);

INSERT INTO

departments(department_id,department_name,location_id) VALUES
(7,'Public Relations',2700);

INSERT INTO

departments(department_id,department_name,location_id) VALUES
(8,'Sales',2500);

departments(department_id,department_name,location_id) VALUES
(9,'Executive',1700);

INSERT INTO

departments(department_id,department_name,location_id) VALUES
(10,'Finance',1700);

INSERT INTO

departments(department_id,department_name,location_id) VALUES
(11,'Accounting',1700);

/*Data for the table employees */

INSERT INTO

employees(employee_id,first_name,last_name,email,phone_number,hire_da t e,job_id,salary,manager_id,department_id) VALUES (100,'Steven','King','steven.king@sqltutorial.org','515.123.4567','1987-06 - 17',4,24000.00,NULL,9);

INSERT INTO

employees(employee_id,first_name,last_name,email,phone_number,hire_da t e,job_id,salary,manager_id,department_id) VALUES (101,'Neena','Kochhar','neena.kochhar@sqltutorial.org','515.123.4568','1989 - 09-21',5,17000.00,100,9);

INSERT INTO

employees(employee_id,first_name,last_name,email,phone_number,hire_da t e,job_id,salary,manager_id,department_id) VALUES (102,'Lex','De Haan','lex.de haan@sqltutorial.org','515.123.4569','1993-01-13',5,17000.00,100,9);

INSERT INTO

employees(employee_id,first_name,last_name,email,phone_number,hire_da t e,job_id,salary,manager_id,department_id) VALUES (103,'Alexander','Hunold','alexander.hunold@sqltutorial.org','590.423.4567',' 1 990-01-03',9,9000.00,102,6);

INSERT INTO

employees(employee_id,first_name,last_name,email,phone_number,hire_da t e,job_id,salary,manager_id,department_id) VALUES (104,'Bruce','Ernst','bruce.ernst@sqltutorial.org','590.423.4568','1991-05 - 21',9,6000.00,103,6);

INSERT INTO

employees(employee_id,first_name,last_name,email,phone_number,hire_da t e,job_id,salary,manager_id,department_id) VALUES (105,'David','Austin','david.austin@sqltutorial.org','590.423.4569','1997-0 6- 25',9,4800.00,103,6);

INSERT INTO

employees(employee_id,first_name,last_name,email,phone_number,hire_da t e,job_id,salary,manager_id,department_id) VALUES (106,'Valli','Pataballa','valli.pataballa@sqltutorial.org','590.423.4560','1998-02 - 05',9,4800.00,103,6);

INSERT INTO

employees(employee_id,first_name,last_name,email,phone_number,hire_da t e,job_id,salary,manager_id,department_id) VALUES (107,'Diana','Lorentz','diana.lorentz@sqltutorial.org','590.423.5567','1999-02 - 07',9,4200.00,103,6);

INSERT INTO

employees(employee_id,first_name,last_name,email,phone_number,hire_date,job_id,salary,manager_id,department_id) VALUES (108,'Nancy','Greenberg','nancy.greenberg@sqltutorial.org','515.124.4569','

1 994-08-17',7,12000.00,101,10);

INSERT INTO

employees(employee_id,first_name,last_name,email,phone_number,hire_da t e,job_id,salary,manager_id,department_id) VALUES (109,'Daniel','Faviet','daniel.faviet@sqltutorial.org','515.124.4169','1994-08 - 16',6,9000.00,108,10);

INSERT INTO

employees(employee_id,first_name,last_name,email,phone_number,hire_da t e,job_id,salary,manager_id,department_id) VALUES (110,'John','Chen','john.chen@sqltutorial.org','515.124.4269','1997-09 - 28',6,8200.00,108,10);

INSERT INTO

employees(employee_id,first_name,last_name,email,phone_number,hire_da t e,job_id,salary,manager_id,department_id) VALUES (111,'Ismael','Sciarra','ismael.sciarra@sqltutorial.org','515.124.4369','1997-0 9- 30',6,7700.00,108,10);

INSERT INTO

employees(employee_id,first_name,last_name,email,phone_number,hire_da t e,job_id,salary,manager_id,department_id) VALUES (112,'Jose Manuel','Urman','jose manuel.urman@sqltutorial.org','515.124.4469','1998-03-07',6,7800.00,108,10);

INSERT INTO

employees(employee_id,first_name,last_name,email,phone_number,hire_da t e,job_id,salary,manager_id,department_id) VALUES (113,'Luis','Popp','luis.popp@sqltutorial.org','515.124.4567','1999-12 - 07',6,6900.00,108,10);

INSERT INTO

employees(employee_id,first_name,last_name,email,phone_number,hire_da

t e,job_id,salary,manager_id,department_id) VALUES (114,'Den','Raphaely','den.raphaely@sqltutorial.org','515.127.4561','1994-12 - 07',14,11000.00,100,3);

INSERT INTO

employees(employee_id,first_name,last_name,email,phone_number,hire_da t e,job_id,salary,manager_id,department_id) VALUES (115,'Alexander','Khoo','alexander.khoo@sqltutorial.org','515.127.4562','199 5 -05-18',13,3100.00,114,3);

INSERT INTO

employees(employee_id,first_name,last_name,email,phone_number,hire_da t e,job_id,salary,manager_id,department_id) VALUES (116,'Shelli','Baida','shelli.baida@sqltutorial.org','515.127.4563','1997-1 2- 24',13,2900.00,114,3);

INSERT INTO

employees(employee_id,first_name,last_name,email,phone_number,hire_da t e,job_id,salary,manager_id,department_id) VALUES (117,'Sigal','Tobias','sigal.tobias@sqltutorial.org','515.127.4564','1997-07 - 24',13,2800.00,114,3);

INSERT INTO

employees(employee_id,first_name,last_name,email,phone_number,hire_da t e,job_id,salary,manager_id,department_id) VALUES (118,'Guy','Himuro','guy.himuro@sqltutorial.org','515.127.4565','1998-11 - 15',13,2600.00,114,3);

INSERT INTO

employees(employee_id,first_name,last_name,email,phone_number,hire_da t e,job_id,salary,manager_id,department_id) VALUES (119,'Karen','Colmenares','karen.colmenares@sqltutorial.org','515.127.4566',' 1999-08-10',13,2500.00,114,3);

INSERT INTO

employees(employee_id,first_name,last_name,email,phone_number,hire_da t e,job_id,salary,manager_id,department_id) VALUES (120,'Matthew','Weiss','matthew.weiss@sqltutorial.org','650.123.1234','1996 - 07-18',19,8000.00,100,5);

INSERT INTO

employees(employee_id,first_name,last_name,email,phone_number,hire_da t e,job_id,salary,manager_id,department_id) VALUES (121,'Adam','Fripp','adam.fripp@sqltutorial.org','650.123.2234','1997-04 - 10',19,8200.00,100,5);

INSERT INTO

employees(employee_id,first_name,last_name,email,phone_number,hire_date,job_id,salary,manager_id,department_id) VALUES (122,'Payam','Kaufling','payam.kaufling@sqltutorial.org','650.123.3234','1995 - 05-01',19,7900.00,100,5);

INSERT INTO

employees(employee_id,first_name,last_name,email,phone_number,hire_da t e,job_id,salary,manager_id,department_id) VALUES (123,'Shanta','Vollman','shanta.vollman@sqltutorial.org','650.123.4234','1997 - 10-10',19,6500.00,100,5);

INSERT INTO

employees(employee_id,first_name,last_name,email,phone_number,hire_date,job_id,salary,manager_id,department_id) VALUES (126,'Irene','Mikkilineni','irene.mikkilineni@sqltutorial.org','650.124.1224','1998-09-28',18,2700.00,120,5);

INSERT INTO

employees(employee_id,first_name,last_name,email,phone_number,hire_da t e,job_id,salary,manager_id,department_id) VALUES (145,'John','Russell','john.russell@sqltutorial.org',NULL,'1996-1

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0-01',15,14000.00,100,8);
```

employees(employee_id,first_name,last_name,email,phone_number,hire_da t e,job_id,salary,manager_id,department_id) VALUES (146,'Karen','Partners','karen.partners@sqltutorial.org',NULL,'1997-01 - 05',15,13500.00,100,8);

INSERT INTO

employees(employee_id,first_name,last_name,email,phone_number,hire_da t e,job_id,salary,manager_id,department_id) VALUES (176,'Jonathon','Taylor','jonathon.taylor@sqltutorial.org',NULL,'1998-03 - 24',16,8600.00,100,8);

INSERT INTO

employees(employee_id,first_name,last_name,email,phone_number,hire_da t e,job_id,salary,manager_id,department_id) VALUES (177,'Jack','Livingston','jack.livingston@sqltutorial.org',NULL,'1998-0 4- 23',16,8400.00,100,8);

INSERT INTO

employees(employee_id,first_name,last_name,email,phone_number,hire_da t e,job_id,salary,manager_id,department_id) VALUES (178,'Kimberely','Grant','kimberely.grant@sqltutorial.org',NULL,'1999-05 - 24',16,7000.00,100,8);

INSERT INTO

employees(employee_id,first_name,last_name,email,phone_number,hire_da t e,job_id,salary,manager_id,department_id) VALUES (179,'Charles','Johnson','charles.johnson@sqltutorial.org',NULL,'2000-0 1- 04',16,6200.00,100,8);

INSERT INTO

employees(employee id,first name,last name,email,phone number,hire da

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t e,job_id,salary,manager_id,department_id) VALUES (192,'Sarah','Bell','sarah.bell@sqltutorial.org','650.501.1876','1996-0 2- 04',17,4000.00,123,5);
```

employees(employee_id,first_name,last_name,email,phone_number,hire_da t e,job_id,salary,manager_id,department_id) VALUES (193,'Britney','Everett','britney.everett@sqltutorial.org','650.501.2876','1997 - 03-03',17,3900.00,123,5);

INSERT INTO

employees(employee_id,first_name,last_name,email,phone_number,hire_da t e,job_id,salary,manager_id,department_id) VALUES (200,'Jennifer','Whalen','jennifer.whalen@sqltutorial.org','515.123.4444','19 8 7-09-17',3,4400.00,101,1);

INSERT INTO

employees(employee_id,first_name,last_name,email,phone_number,hire_da t e,job_id,salary,manager_id,department_id) VALUES (201,'Michael','Hartstein','michael.hartstein@sqltutorial.org','515.123.5555',' 1 996-02-17',10,13000.00,100,2);

INSERT INTO

employees(employee_id,first_name,last_name,email,phone_number,hire_da t e,job_id,salary,manager_id,department_id) VALUES (202,'Pat','Fay','pat.fay@sqltutorial.org','603.123.6666','1997-08 - 17',11,6000.00,201,2);

INSERT INTO

employees(employee_id,first_name,last_name,email,phone_number,hire_da t e,job_id,salary,manager_id,department_id) VALUES (203,'Susan','Mavris','susan.mavris@sqltutorial.org','515.123.7777','1994-0 6- 07',8,6500.00,101,4);

INSERT INTO

```
employees(employee_id,first_name,last_name,email,phone_number,hire_da t e,job_id,salary,manager_id,department_id) VALUES (204,'Hermann','Baer','hermann.baer@sqltutorial.org','515.123.8888','199 4- 06-07',12,10000.00,101,7);
```

employees(employee_id,first_name,last_name,email,phone_number,hire_da t e,job_id,salary,manager_id,department_id) VALUES (205,'Shelley','Higgins','shelley.higgins@sqltutorial.org','515.123.8080','1994 - 06-07',2,12000.00,101,11);

INSERT INTO

employees(employee_id,first_name,last_name,email,phone_number,hire_da t e,job_id,salary,manager_id,department_id) VALUES (206,'William','Gietz','william.gietz@sqltutorial.org','515.123.8181','1994-0 6- 07',1,8300.00,205,11); /*Data for the table dependents */

INSERT INTO

dependents(dependent_id,first_name,last_name,relationship,employee_id
) VALUES (1,'Penelope','Gietz','Child',206);

INSERT INTO

dependents(dependent_id,first_name,last_name,relationship,employee_id
) VALUES (2,'Nick','Higgins','Child',205);

INSERT INTO

dependents(dependent_id,first_name,last_name,relationship,employee_id
) VALUES (3,'Ed','Whalen','Child',200);

INSERT INTO

dependents(dependent id,first name,last name,relationship,employee id

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) VALUES (4,'Jennifer','King','Child',100);
INSERT INTO
dependents(dependent_id,first_name,last_name,relationship,employee_id
) VALUES (5,'Johnny','Kochhar','Child',101);
INSERT INTO
dependents(dependent id,first name,last name,relationship,employee id
) VALUES (6,'Bette','De Haan','Child',102);
INSERT INTO
dependents(dependent id,first name,last name,relationship,employee id
) VALUES (7,'Grace','Faviet','Child',109);
INSERT INTO
dependents(dependent id,first name,last name,relationship,employee id
) VALUES (8,'Matthew','Chen','Child',110);
INSERT INTO
dependents(dependent id,first name,last name,relationship,employee id
) VALUES (9,'Joe','Sciarra','Child',111);
INSERT INTO
dependents(dependent id,first name,last name,relationship,employee id
) VALUES (10, 'Christian', 'Urman', 'Child', 112);
INSERT INTO
dependents(dependent id,first name,last name,relationship,employee id
) VALUES (11,'Zero','Popp','Child',113);
INSERT INTO
dependents(dependent id,first name,last name,relationship,employee id
) VALUES (12, 'Karl', 'Greenberg', 'Child', 108);
INSERT INTO
dependents(dependent id,first name,last name,relationship,employee id
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) VALUES (13,'Uma','Mavris','Child',203);
INSERT INTO
dependents(dependent_id,first_name,last_name,relationship,employee_id
) VALUES (14,'Vivien','Hunold','Child',103);
INSERT INTO
dependents(dependent id,first name,last name,relationship,employee id
) VALUES (15, 'Cuba', 'Ernst', 'Child', 104);
INSERT INTO
dependents(dependent id,first name,last name,relationship,employee id
) VALUES (16,'Fred','Austin','Child',105);
INSERT INTO
dependents(dependent id,first name,last name,relationship,employee id
) VALUES (17, 'Helen', 'Pataballa', 'Child', 106);
INSERT INTO
dependents(dependent id,first name,last name,relationship,employee id
) VALUES (18, 'Dan', 'Lorentz', 'Child', 107);
INSERT INTO
dependents(dependent id,first name,last name,relationship,employee id
) VALUES (19,'Bob','Hartstein','Child',201);
INSERT INTO
dependents(dependent id,first name,last name,relationship,employee id
) VALUES (20, Lucille', Fay', Child', 202);
INSERT INTO
dependents(dependent id,first name,last name,relationship,employee id
) VALUES (21, 'Kirsten', 'Baer', 'Child', 204);
INSERT INTO
dependents(dependent id,first name,last name,relationship,employee id
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) VALUES (22, 'Elvis', 'Khoo', 'Child', 115);
INSERT INTO
dependents(dependent id,first name,last name,relationship,employee id
) VALUES (23,'Sandra','Baida','Child',116);
INSERT INTO
dependents(dependent id,first name,last name,relationship,employee id
) VALUES (24,'Cameron','Tobias','Child',117);
INSERT INTO
dependents(dependent id,first name,last name,relationship,employee id
) VALUES (25,'Kevin','Himuro','Child',118);
INSERT INTO
dependents(dependent id,first name,last name,relationship,employee id
) VALUES (26,'Rip','Colmenares','Child',119);
INSERT INTO
dependents(dependent id,first name,last name,relationship,employee id
) VALUES (27, 'Julia', 'Raphaely', 'Child', 114);
INSERT INTO
dependents(dependent id,first name,last name,relationship,employee id
) VALUES (28,'Woody','Russell','Child',145);
INSERT INTO
dependents(dependent id,first name,last name,relationship,employee id
) VALUES (29,'Alec','Partners','Child',146);
INSERT INTO
dependents(dependent id,first name,last name,relationship,employee id
) VALUES (30,'Sandra','Taylor','Child',176);O REGIONS VALUES (4,'Middle
East and Africa');
```