

## ASSIGNMENT 19

### TOTAL DATABASE

```
mysql> show tables;
+-----+
| Tables_in_general_hardware_db |
+-----+
| customer
| employee
| office
| product
| sales
| salesperson
+-----+
6 rows in set (0.00 sec)
```

#### i)Customer Table

```
mysql> desc customer;
+-----+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id         | int       | NO   | PRI | NULL    |       |
| cust_name  | varchar(50) | NO   |     | NULL    |       |
| salesperson_id | int       | NO   | MUL | NULL    |       |
| hq_city    | varchar(50) | NO   |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.01 sec)

mysql> select *from customer;
+-----+-----+-----+-----+
| id   | cust_name      | salesperson_id | hq_city      |
+-----+-----+-----+-----+
| 121  | Main St. Hardware | 137            | New York     |
| 839  | Jane?s Stores   | 186            | Chicago      |
| 933  | ABC Home Stores | 137            | Los Angeles  |
| 1047 | Acme Hardware Store | 137            | Los Angeles  |
| 1525 | Fred?s Tool Stores | 361            | Atlanta      |
| 1700 | XYZ Stores      | 361            | Washington   |
| 1826 | City Hardware   | 137            | New York     |
| 2198 | Western Hardware | 204            | New York     |
| 2267 | Central Stores  | 186            | New York     |
+-----+-----+-----+-----+
9 rows in set (0.00 sec)
```

#### ii)Employee

```
mysql> desc employee;
```

Field	Type	Null	Key	Default	Extra
id	int	YES		NULL	
customer_id	int	NO	MUL	NULL	
name	varchar(50)	NO		NULL	
job_title	varchar(50)	NO		NULL	

```
4 rows in set (0.00 sec)
```

```
mysql> select *from employee;
```

id	customer_id	name	job_title
27498	121	Smith	Co-Owner
30441	121	Garcia	Co-Owner
25270	933	Chen	VP Sales
30441	933	Levy	Sales Manager
48285	933	Morton	President
33779	1525	Baker	Sales Manager
27470	2198	Smith	President
30441	2198	Jones	VP Sales
33779	2198	Garcia	VP Personnel
35268	2198	Kaplan	Senior Accountant

```
10 rows in set (0.00 sec)
```

### iii)Office Table

```
mysql> desc office;
+-----+-----+-----+-----+-----+-----+
| Field      | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id         | int           | NO   | PRI | NULL    |       |
| telephone  | varchar(50)   | NO   |     | NULL    |       |
| size_sq_ft | int           | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.01 sec)
```

```
mysql> select *from office;
+-----+-----+-----+
| id   | telephone | size_sq_ft |
+-----+-----+-----+
| 1209 | 901-555-3108 | 95         |
| 1227 | 901-555-0364 | 100        |
| 1253 | 901-555-4276 | 120        |
| 1284 | 901-555-7335 | 120        |
+-----+-----+-----+
4 rows in set (0.00 sec)
```

#### iv)Product Table

```
mysql> desc product;
+-----+-----+-----+-----+-----+-----+
| Field      | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id         | int           | NO   | PRI | NULL    |       |
| name       | varchar(50)   | NO   |     | NULL    |       |
| unit_price | decimal(4,2)  | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.01 sec)
```

```
mysql> select *from product;
+-----+-----+-----+
| id   | name   | unit_price |
+-----+-----+-----+
| 16386 | Wrench | 12.95      |
| 19440 | Hammer | 17.50      |
| 21765 | Drill  | 32.99      |
| 24013 | Saw    | 26.25      |
| 26722 | Pliers | 11.50      |
+-----+-----+-----+
5 rows in set (0.00 sec)
```

#### v)Sales Table

```
mysql> desc sales;
```

Field	Type	Null	Key	Default	Extra
salesperson_id	int	NO	MUL	NULL	
product_id	int	NO	MUL	NULL	
quantity	int	NO		NULL	

```
3 rows in set (0.00 sec)
```

  

```
mysql> select *from sales;
```

salesperson_id	product_id	quantity
137	19440	473
137	24013	170
137	26722	688
186	16386	1745
186	19440	2529
186	21765	1962
186	24013	3071
204	21765	809
204	26722	734
361	16386	3729
361	21765	3110
361	26722	2738

```
12 rows in set (0.00 sec)
```

## vi)SalesPerson Table

```
mysql> desc salesperson;
```

Field	Type	Null	Key	Default	Extra
id	int	NO	PRI	NULL	
name	varchar(50)	NO		NULL	
commision_percentage	int	YES		NULL	
year_of_hire	int	NO		NULL	
office_id	int	NO	MUL	NULL	

```
5 rows in set (0.01 sec)
```

  

```
mysql> select *from salesperson;
```

id	name	commision_percentage	year_of_hire	office_id
137	Baker	10	1995	1284
186	Adams	15	2001	1253
204	Dickens	10	1998	1209
361	Carlyle	20	2001	1227

```
4 rows in set (0.00 sec)
```

**Q1)Write a SQL query to display the total quantities sold for each product.**

```
+-----+-----+
| PRODUCT_NAME | PRODUCT_TOTAL_SALE |
+-----+-----+
| Wrench       | 5474                |
| Hammer      | 3002                |
| Drill        | 5881                |
| Saw          | 3241                |
| Pliers       | 4160                |
+-----+-----+
5 rows in set (0.00 sec)
```

```
select product.name    PRODUCT_NAME,sum(sales.quantity)
PRODUCT_TOTAL_SALE    from    sales    join    product    on
product.id=sales.product_id group by(sales.product_id);
```

**Q2 Write a SQL query to display the salesperson's name and total quantities of all products sold by each salesperson.**

```

+-----+-----+
| name      | sum(sales.quantity) |
+-----+-----+
| Baker      |          1331      |
| Adams      |          9307      |
| Dickens    |          1543      |
| Carlyle    |          9577      |
+-----+-----+
4 rows in set (0.00 sec)

```

select salesperson.name,sum(sales.quantity) from sales join salesperson on salesperson.id=sales.salesperson\_id group by(salesperson\_id);

**Q3)Write a SQL query to display the customer name, salesperson name, and office size of the salesperson.**

```

+-----+-----+-----+
| cust_name      | name      | size_sq_ft |
+-----+-----+-----+
| Main St. Hardware | Baker      |          120 |
| ABC Home Stores   | Baker      |          120 |
| Acme Hardware Store | Baker      |          120 |
| City Hardware     | Baker      |          120 |
| Jane's Stores     | Adams      |          120 |
| Central Stores    | Adams      |          120 |
| Western Hardware  | Dickens    |           95 |
| Fred's Tool Stores | Carlyle    |          100 |
| XYZ Stores        | Carlyle    |          100 |
+-----+-----+-----+
9 rows in set (0.00 sec)

```

select customer.cust\_name,salesperson.name, office.size\_sq\_ft from customer join salesperson on customer.salesperson\_id=salesperson.id join office on salesperson.office\_id=office.id;

**Q4)Write a SQL query to display the count of all customers from each headquarter city.**

```

+-----+-----+
| HEAD_QUARTER_NAME | NUMBER_OF_CUSTOMER |
+-----+-----+
| New York          | 4                   |
| Chicago           | 1                   |
| Los Angeles       | 2                   |
| Atlanta           | 1                   |
| Washington        | 1                   |
+-----+-----+
5 rows in set (0.00 sec)

```

```

select      hq_city      HEAD_QUARTER_NAME      ,count(id)
NUMBER_OF_CUSTOMER from customer where hq_city in (select hq_city from
customer ) group by(hq_city);

```

**Q5)Write a SQL query to display the salesperson name, product name of the product sold by the salesperson, and quantities of each product.**

```

+-----+-----+-----+
| SalesPersonName | ProductName | sum(sales.quantity) |
+-----+-----+-----+
| Baker          | Hammer     | 473                  |
| Baker          | Saw        | 170                  |
| Baker          | Pliers     | 688                  |
| Adams          | Wrench     | 1745                 |
| Adams          | Hammer     | 2529                 |
| Adams          | Drill      | 1962                 |
| Adams          | Saw        | 3071                 |
| Dickens        | Drill      | 809                  |
| Dickens        | Pliers     | 734                  |
| Carlyle        | Wrench     | 3729                 |
| Carlyle        | Drill      | 3110                 |
| Carlyle        | Pliers     | 2738                 |
+-----+-----+-----+
12 rows in set (0.00 sec)

```

```

select salesperson.name, product.name,sum(sales.quantity) from sales join product on
sales.product_id=product.id join salesperson on salesperson.id=sales.salesperson_id group
by(sales.quantity);

```

**Q6)Write a SQL query to display the salesperson name, a commission earned for all the products sold by all salespersons**

```

select salesperson.name ,(product.unit_price*sales.quantity)/10 from sales join product on
sales.product_id = product.id join salesperson on sales.salesperson_id = salesperson.id;

```

```
+-----+-----+
| name | (product.unit_price*sales.quantity)/10 |
+-----+-----+
| Baker | 827.750000 |
| Baker | 446.250000 |
| Baker | 791.200000 |
| Adams | 2259.775000 |
| Adams | 4425.750000 |
| Adams | 6472.638000 |
| Adams | 8061.375000 |
| Dickens | 2668.891000 |
| Dickens | 844.100000 |
| Carlyle | 4829.055000 |
| Carlyle | 10259.890000 |
| Carlyle | 3148.700000 |
+-----+-----+
12 rows in set (0.17 sec)
```