

CS 207 Assignment 5
Group - 4
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1.

create table customer_quantity_copy(customerName varchar(255), QUANTITY int(11));

```
mysql> create table customer_quantity_copy( customerName varchar(255), QUANTITY int(11) );
Query OK, 0 rows affected (0.04 sec)

mysql> desc customer_quantity_copy;
+-----+-----+-----+-----+-----+-----+
| Field          | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| customerName   | varchar(255)  | YES  |     | NULL    |       |
| QUANTITY       | int(11)       | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.01 sec)

mysql> select * from customer_quantity_copy
-> ;
Empty set (0.00 sec)
```

delimiter \$\$

```
create procedure copyCustomerQuantity ()
BEGIN
    declare v_finished integer Default 0;
    declare cName varchar(255) Default " ";
    declare q integer Default 0;
    declare quantityCursor cursor for
        select customers.customerName, sum(orderdetails.quantityOrdered) from orders inner join
orderdetails on orders.orderNumber = orderdetails.orderNumber inner join customers on
customers.customerNumber = orders.customerNumber group by orders.customerNumber ;
    declare continue handler for not found set v_finished = 1;
    open quantityCursor;
    getQuantity: loop
        fetch quantityCursor into cName, q;
        if v_finished = 1 then
            leave getQuantity;
        end if;
        insert into customer_quantity_copy values(cName, q);
    end loop getQuantity;
    close quantityCursor;
END $
```

```
mysql> create procedure copyCustomerQuantity ()
-> BEGIN
-> declare v_finished integer Default 0;
-> declare cName varchar(255) Default " ";
-> declare q integer Default 0;
-> declare quantityCursor cursor for
-> select customers.customerName, sum(orderdetails.quantityOrdered) from orders inner join orderdetails on orders.orderNumber = orderdetails.orderNum
ber inner join customers on customers.customerNumber = orders.customerNumber group by orders.customerNumber ;
-> declare continue handler for not found set v_finished = 1;
-> open quantityCursor;
-> getQuantity: loop
-> fetch quantityCursor into cName, q;
-> if v_finished = 1 then
-> leave getQuantity;
-> end if;
-> insert into customer_quantity_copy values(cName, q);
-> end loop getQuantity;
-> close quantityCursor;
-> END $$
Query OK, 0 rows affected (0.00 sec)
```

delimiter ;

call copyCustomerQuantity;

select * from customer_quantity_copy limit 10;

```
mysql> call copyCustomerQuantity;
Query OK, 0 rows affected (0.04 sec)

mysql> select * from customer_quantity_copy limit 10;
+-----+-----+
| customerName          | QUANTITY |
+-----+-----+
| Atelier graphique     | 270      |
| Signal Gift Stores    | 929      |
| Australian Collectors, Co. | 1926     |
| La Rochelle Gifts     | 1832     |
| Baane Mini Imports    | 1082     |
| Mini Gifts Distributors Ltd. | 6366     |
| Blauer See Auto, Co.  | 811      |
| Mini Wheels Co.       | 692      |
| Land of Toys Inc.     | 1631     |
| Euro+ Shopping Channel | 9327     |
+-----+-----+
10 rows in set (0.00 sec)
```

2.

create table employee_audit (id int(11) primary key auto_increment, employeeNumber int(11) not null, lastname varchar(50) not null, changedat datetime, action varchar(50))\$\$

```
mysql> desc employee_audit
-> $$
+-----+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra      |
+-----+-----+-----+-----+-----+-----+
| id         | int(11)   | NO   | PRI | NULL    | auto_increment |
| employeeNumber | int(11)   | NO   |     | NULL    |              |
| lastname   | varchar(50) | NO   |     | NULL    |              |
| changedat  | datetime  | YES  |     | NULL    |              |
| action     | varchar(50) | YES  |     | NULL    |              |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.13 sec)
```

create trigger audit_before_update before update on employees for each row begin insert into employee_audit (employeeNumber, lastname, changedat, action) values (OLD.employeeNumber, OLD.lastname, CURRENT_TIMESTAMP, "update"); end\$\$

```
mysql> select * from employee_audit
-> $$
+----+-----+-----+-----+-----+
| id | employeeNumber | lastname | changedat | action |
+----+-----+-----+-----+-----+
| 1  | 1056 | Patterson | 2018-09-29 22:08:08 | update |
+----+-----+-----+-----+-----+
1 row in set (0.01 sec)
```

3.

create table customer_audit (id int(11) primary key auto_increment, customerID int(11) not null, user_name varchar(50) not null, ContactName varchar(100) not null, changedat datetime, action varchar(50));

```
mysql> desc customer_audit;$$
+-----+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra      |
+-----+-----+-----+-----+-----+-----+
| id         | int(11)   | NO   | PRI | NULL    | auto_increment |
| customerID | int(11)   | NO   |     | NULL    |              |
| user_name  | varchar(50) | NO   |     | NULL    |              |
| ContactName | varchar(100) | NO   |     | NULL    |              |
| changedat  | datetime  | YES  |     | NULL    |              |
| action     | varchar(50) | YES  |     | NULL    |              |
+-----+-----+-----+-----+-----+-----+
6 rows in set (0.01 sec)
```

create trigger audit_after_delete after delete on Customers for each row begin insert into customer_audit (customerid, user_name, contactname, changedat, action) values (OLD.customerID, CURRENT_USER(), OLD.contactname, CURRENT_TIMESTAMP, "DELETE"); end\$\$

```
mysql> select * from customer_audit$$
```

id	customerID	user_name	ContactName	changedat	action
1	1	shreyanshkuls@localhost	Maria Anders	2018-09-29 22:24:39	DELETE

1 row in set (0.00 sec)