

Name : Bhavani Rajpurohit

Class : AIA-3

Roll No : 2213688

Subject: DBMS LAB

Batch : B

ASSIGNMENT NO: 07

Aim: PL/SQL: Implicit and Explicit Cursors and Triggers.

- A. Write a Trigger for purchase table where total will be calculated when value is inserted in the table.
- B.
 1. Use the table production.products with Product_id, Product_name, Brand_id, Category_id, model_year, list_price,
 2. Declare two variables to hold product name and list price, and a cursor to hold the result of a query that retrieves product name and list price from the production.products table
 3. fetch each row from the cursor and print out the product name and list price

Software required: MySQL

Implementation:

A]

Write a Trigger for purchase table where total will be calculated when value is inserted in the table.

```
CREATE TABLE purchase (  
    product VARCHAR(15),  
    price INT(6)  
);
```

```
set @total = 0;
```

```
delimiter /
```

```
create trigger tri  
after insert on purchase  
for each row
```

```
begin
```

```

        SET @total = (SELECT SUM(price) FROM purchase);

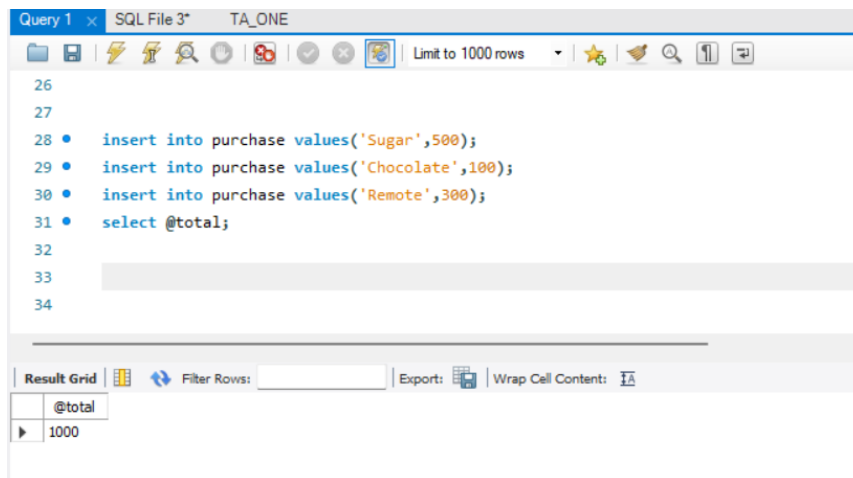
end;
/
delimiter ;

```

```

insert into purchase values('Sugar',500);
insert into purchase values('Chocolate',100);
insert into purchase values('Remote',300);
select @total;

```



B]

DELIMITER ;

```

CREATE TABLE products (
    Product_name VARCHAR(255),
    Brand_id INT,
    Category_id INT,
    model_year YEAR,
    list_price INT
);

```

drop table products;

```

INSERT INTO products (Product_name, Brand_id, Category_id, model_year, list_price) VALUES
('Laptop', 1, 2, 2023, 999),
('Smartphone', 2, 1, 2023, 599),
('Tablet', 3, 2, 2022, 349),
('Desktop Computer', 1, 2, 2023, 1299),
('Camera', 4, 3, 2023, 799);

```

```

delimiter /
CREATE PROCEDURE ListD()
BEGIN

```

```
DECLARE done INT DEFAULT 0;
DECLARE prod_name VARCHAR(255);
DECLARE prod_price INT;
```

```
DECLARE cur CURSOR FOR
  SELECT Product_name,list_price
  FROM products;
```

```
DECLARE CONTINUE HANDLER FOR NOT FOUND SET done = 1;
```

```
OPEN cur;
```

```
read_loop: LOOP
  FETCH cur INTO prod_name,prod_price;
  IF done = 1 THEN
    LEAVE read_loop;
  END IF;
```

```
  SELECT CONCAT('Name :',prod_name,' Price :',prod_price) AS Prod_Info;
END LOOP;
CLOSE cur;
```

```
END /
```

```
delimiter ;
```

```
mysql> call ListD();
+-----+
| Prod_Info |
+-----+
| Name :Laptop Price :999 |
+-----+
1 row in set (0.00 sec)

+-----+
| Prod_Info |
+-----+
| Name :Smartphone Price :599 |
+-----+
1 row in set (0.00 sec)

+-----+
| Prod_Info |
+-----+
| Name :Tablet Price :349 |
+-----+
1 row in set (0.00 sec)

+-----+
| Prod_Info |
+-----+
| Name :Desktop Computer Price :1299 |
+-----+
1 row in set (0.00 sec)

+-----+
| Prod_Info |
+-----+
| Name :Camera Price :799 |
+-----+
1 row in set (0.00 sec)

Query OK, 0 rows affected (0.01 sec)
```

Conclusion:

Hence, we have succesfully implmented Triggers and Cursors.