**Sales Data Analysis**

**create database Product\_sales;**

**CREATE TABLE product\_data (**

**product\_id VARCHAR(20) NOT NULL,**

**product\_name VARCHAR(100),**

**category VARCHAR(50),**

**cost\_price int,**

**sale\_price int,**

**brand VARCHAR(50),**

**description TEXT,**

**image\_url VARCHAR(255),**

**PRIMARY KEY (product\_id)**

**);**

**select \* from product\_data;**

**CREATE TABLE Product\_sales (**

**sale\_date DATE NOT NULL,**

**customer\_name VARCHAR(100),**

**country VARCHAR(100),**

**product\_name VARCHAR(100),**

**discount VARCHAR(50),**

**units\_sold INT**

**);**

**alter table product\_sales**

**change column discount discount\_band VARCHAR(100);**

**Select \* from product\_sales;**

**CREATE TABLE Discount\_Data (**

**Month varchar(100),**

**dicount\_band varchar(100),**

**discount decimal(10,2)**

**);**

**select \* from discount\_data;**

**DESCRIBE discount\_data;**

**WITH CTE AS (**

**SELECT**

**a.product\_name,**

**a.category,**

**a.brand,**

**a.description,**

**a.cost\_price,**

**a.sale\_price,**

**a.image\_url,**

**b.sale\_date,**

**b.customer\_name,**

**b.discount\_band,**

**b.units\_sold,**

**(sale\_price \* units\_sold) AS Revenue,**

**(cost\_price \* units\_sold) AS Total\_cost,**

**DATE\_FORMAT(sale\_date, '%M') AS Month,**

**DATE\_FORMAT(sale\_date, '%Y') AS Year**

**FROM product\_data a**

**JOIN product\_sales b**

**ON TRIM(a.product\_id) = TRIM(b.product\_name)**

**)**

**SELECT \*,**

**(1-discount/100) \* Revenue as Discount\_Amount**

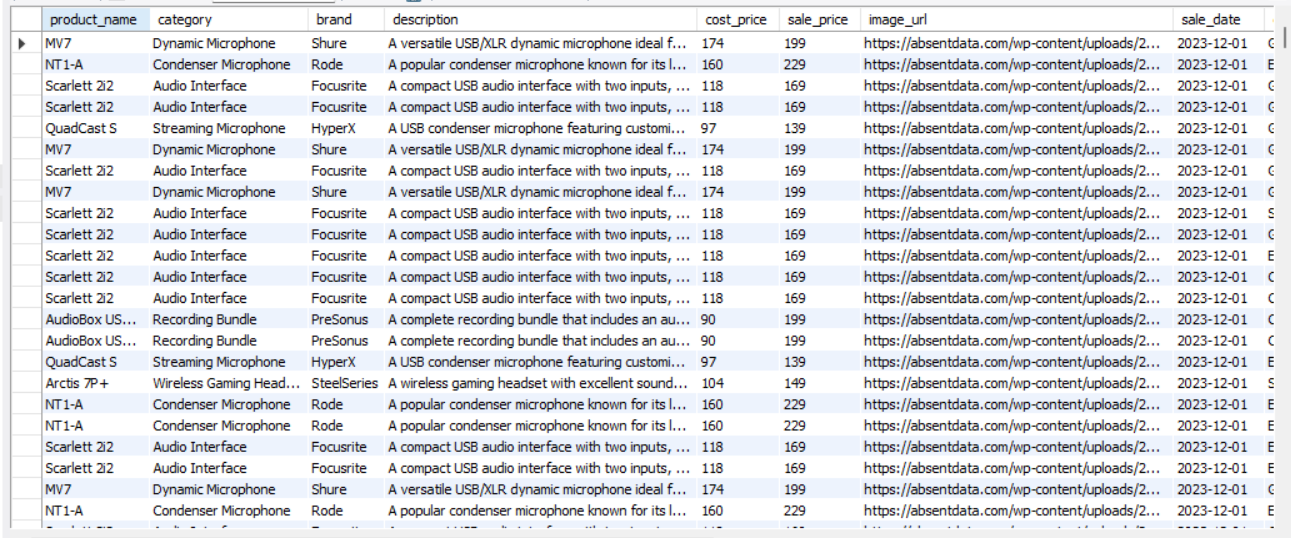
**FROM CTE a**

**JOIN discount\_data b**

**ON TRIM(LOWER(a.discount\_band)) = TRIM(LOWER(b.dicount\_band))**

**AND TRIM(a.Month) = TRIM(b.Month);**

**Result:**

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