**Case Study – Textile Sales**

CREATE DATABASE TEXTILE;

USE TEXTILE;

CREATE TABLE sales(

prod\_id VARCHAR(6) NOT NULL

,qty INTEGER NOT NULL

,price INTEGER NOT NULL

,discount INTEGER NOT NULL

,member VARCHAR(5) NOT NULL

,txn\_id VARCHAR(6) NOT NULL

,start\_txn\_time VARCHAR(24) NOT NULL);

CREATE TABLE product\_prices(

id INTEGER NOT NULL PRIMARY KEY

,product\_id VARCHAR(6) NOT NULL

,price INTEGER NOT NULL);

INSERT INTO product\_prices(id,product\_id,price) VALUES (7,'c4a632',13);

INSERT INTO product\_prices(id,product\_id,price) VALUES (8,'e83aa3',32);

INSERT INTO product\_prices(id,product\_id,price) VALUES (9,'e31d39',10);

INSERT INTO product\_prices(id,product\_id,price) VALUES (10,'d5e9a6',23);

INSERT INTO product\_prices(id,product\_id,price) VALUES (11,'72f5d4',19);

INSERT INTO product\_prices(id,product\_id,price) VALUES (12,'9ec847',54);

INSERT INTO product\_prices(id,product\_id,price) VALUES (13,'5d267b',40);

INSERT INTO product\_prices(id,product\_id,price) VALUES (14,'c8d436',10);

INSERT INTO product\_prices(id,product\_id,price) VALUES (15,'2a2353',57);

INSERT INTO product\_prices(id,product\_id,price) VALUES (16,'f084eb',36);

INSERT INTO product\_prices(id,product\_id,price) VALUES (17,'b9a74d',17);

INSERT INTO product\_prices(id,product\_id,price) VALUES (18,'2feb6b',29);

CREATE TABLE product\_hierarchy(

id INTEGER NOT NULL PRIMARY KEY

,parent\_id INTEGER

,level\_text VARCHAR(19) NOT NULL

,level\_name VARCHAR(8) NOT NULL

);

INSERT INTO product\_hierarchy(id,parent\_id,level\_text,level\_name) VALUES (1,NULL,'Womens','Category');

INSERT INTO product\_hierarchy(id,parent\_id,level\_text,level\_name) VALUES (2,NULL,'Mens','Category');

INSERT INTO product\_hierarchy(id,parent\_id,level\_text,level\_name) VALUES (3,1,'Jeans','Segment');

INSERT INTO product\_hierarchy(id,parent\_id,level\_text,level\_name) VALUES (4,1,'Jacket','Segment');

INSERT INTO product\_hierarchy(id,parent\_id,level\_text,level\_name) VALUES (5,2,'Shirt','Segment');

INSERT INTO product\_hierarchy(id,parent\_id,level\_text,level\_name) VALUES (6,2,'Socks','Segment');

INSERT INTO product\_hierarchy(id,parent\_id,level\_text,level\_name) VALUES (7,3,'Navy Oversized','Style');

INSERT INTO product\_hierarchy(id,parent\_id,level\_text,level\_name) VALUES (8,3,'Black Straight','Style');

INSERT INTO product\_hierarchy(id,parent\_id,level\_text,level\_name) VALUES (9,3,'Cream Relaxed','Style');

INSERT INTO product\_hierarchy(id,parent\_id,level\_text,level\_name) VALUES (10,4,'Khaki Suit','Style');

INSERT INTO product\_hierarchy(id,parent\_id,level\_text,level\_name) VALUES (11,4,'Indigo Rain','Style');

INSERT INTO product\_hierarchy(id,parent\_id,level\_text,level\_name) VALUES (12,4,'Grey Fashion','Style');

INSERT INTO product\_hierarchy(id,parent\_id,level\_text,level\_name) VALUES (13,5,'White Tee','Style');

INSERT INTO product\_hierarchy(id,parent\_id,level\_text,level\_name) VALUES (14,5,'Teal Button Up','Style');

INSERT INTO product\_hierarchy(id,parent\_id,level\_text,level\_name) VALUES (15,5,'Blue Polo','Style');

INSERT INTO product\_hierarchy(id,parent\_id,level\_text,level\_name) VALUES (16,6,'Navy Solid','Style');

INSERT INTO product\_hierarchy(id,parent\_id,level\_text,level\_name) VALUES (17,6,'White Striped','Style');

INSERT INTO product\_hierarchy(id,parent\_id,level\_text,level\_name) VALUES (18,6,'Pink Fluro Polkadot','Style');

CREATE TABLE product\_details(

product\_id VARCHAR(6) NOT NULL PRIMARY KEY

,price INTEGER NOT NULL

,product\_name VARCHAR(32) NOT NULL

,category\_id INTEGER NOT NULL

,segment\_id INTEGER NOT NULL

,style\_id INTEGER NOT NULL

,category\_name VARCHAR(6) NOT NULL

,segment\_name VARCHAR(6) NOT NULL

,style\_name VARCHAR(19) NOT NULL);

INSERT INTO product\_details(product\_id,price,product\_name,category\_id,segment\_id,style\_id,category\_name,segment\_name,style\_name) VALUES ('c4a632',13,'Navy Oversized Jeans - Womens',1,3,7,'Womens','Jeans','Navy Oversized');

INSERT INTO product\_details(product\_id,price,product\_name,category\_id,segment\_id,style\_id,category\_name,segment\_name,style\_name) VALUES ('e83aa3',32,'Black Straight Jeans - Womens',1,3,8,'Womens','Jeans','Black Straight');

INSERT INTO product\_details(product\_id,price,product\_name,category\_id,segment\_id,style\_id,category\_name,segment\_name,style\_name) VALUES ('e31d39',10,'Cream Relaxed Jeans - Womens',1,3,9,'Womens','Jeans','Cream Relaxed');

INSERT INTO product\_details(product\_id,price,product\_name,category\_id,segment\_id,style\_id,category\_name,segment\_name,style\_name) VALUES ('d5e9a6',23,'Khaki Suit Jacket - Womens',1,4,10,'Womens','Jacket','Khaki Suit');

INSERT INTO product\_details(product\_id,price,product\_name,category\_id,segment\_id,style\_id,category\_name,segment\_name,style\_name) VALUES ('72f5d4',19,'Indigo Rain Jacket - Womens',1,4,11,'Womens','Jacket','Indigo Rain');

INSERT INTO product\_details(product\_id,price,product\_name,category\_id,segment\_id,style\_id,category\_name,segment\_name,style\_name) VALUES ('9ec847',54,'Grey Fashion Jacket - Womens',1,4,12,'Womens','Jacket','Grey Fashion');

INSERT INTO product\_details(product\_id,price,product\_name,category\_id,segment\_id,style\_id,category\_name,segment\_name,style\_name) VALUES ('5d267b',40,'White Tee Shirt - Mens',2,5,13,'Mens','Shirt','White Tee');

INSERT INTO product\_details(product\_id,price,product\_name,category\_id,segment\_id,style\_id,category\_name,segment\_name,style\_name) VALUES ('c8d436',10,'Teal Button Up Shirt - Mens',2,5,14,'Mens','Shirt','Teal Button Up');

INSERT INTO product\_details(product\_id,price,product\_name,category\_id,segment\_id,style\_id,category\_name,segment\_name,style\_name) VALUES ('2a2353',57,'Blue Polo Shirt - Mens',2,5,15,'Mens','Shirt','Blue Polo');

INSERT INTO product\_details(product\_id,price,product\_name,category\_id,segment\_id,style\_id,category\_name,segment\_name,style\_name) VALUES ('f084eb',36,'Navy Solid Socks - Mens',2,6,16,'Mens','Socks','Navy Solid');

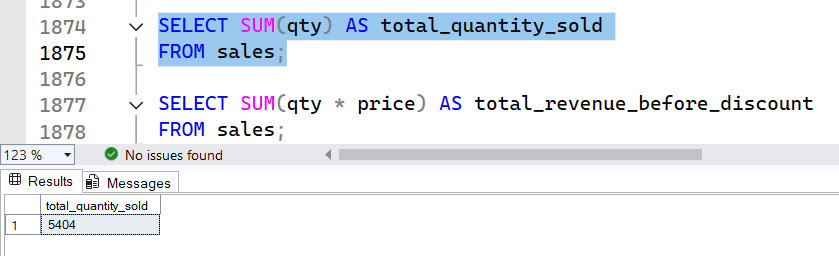
INSERT INTO product\_details(product\_id,price,product\_name,category\_id,segment\_id,style\_id,category\_name,segment\_name,style\_name) VALUES ('b9a74d',17,'White Striped Socks - Mens',2,6,17,'Mens','Socks','White Striped');

INSERT INTO product\_details(product\_id,price,product\_name,category\_id,segment\_id,style\_id,category\_name,segment\_name,style\_name) VALUES ('2feb6b',29,'Pink Fluro Polkadot Socks - Mens',2,6,18,'Mens','Socks','Pink Fluro Polkadot');

1. **What was the total quantity sold for all products?**

SELECT SUM(qty) AS total\_quantity\_sold

FROM sales;

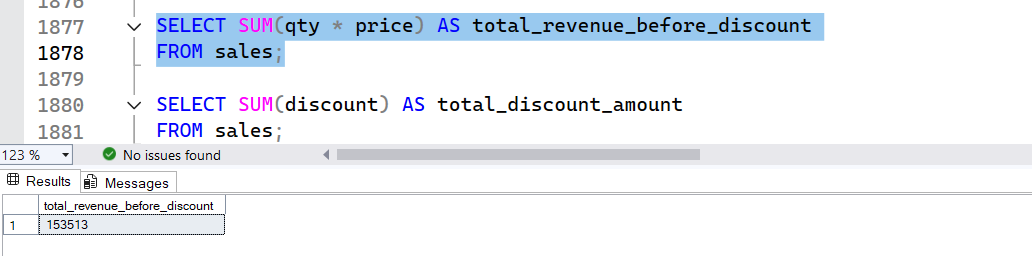


1. **What is the total generated revenue for all products before**

**discounts?**

SELECT SUM(qty \* price) AS total\_revenue\_before\_discount

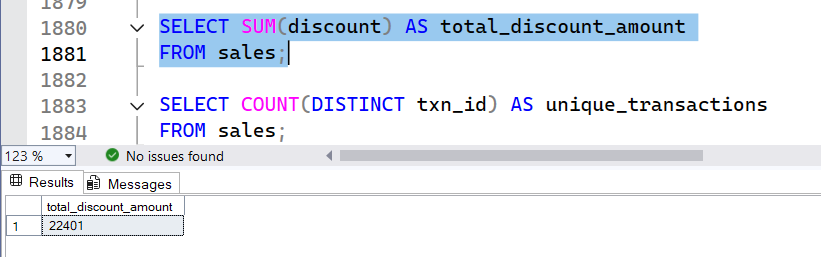
FROM sales;



1. **What was the total discount amount for all products?**

SELECT SUM(discount) AS total\_discount\_amount

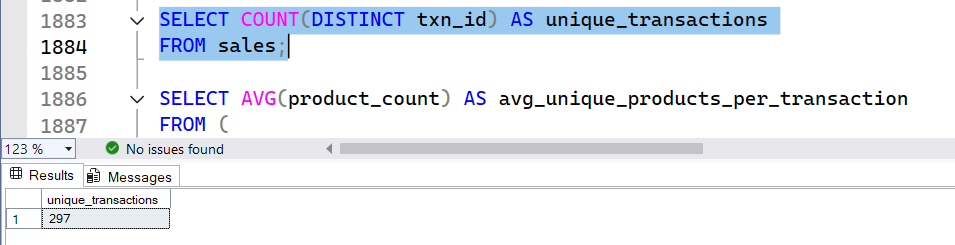
FROM sales;



1. **How many unique transactions were there?**

SELECT COUNT(DISTINCT txn\_id) AS unique\_transactions

FROM sales;



1. **What are the average unique products purchased in each**

**transaction?**

SELECT AVG(product\_count) AS avg\_unique\_products\_per\_transaction

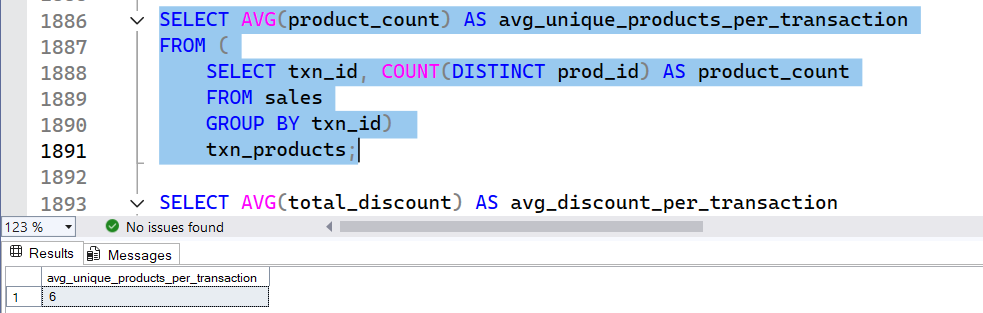
FROM (

SELECT txn\_id, COUNT(DISTINCT prod\_id) AS product\_count

FROM sales

GROUP BY txn\_id)

txn\_products;



1. **What is the average discount value per transaction?**

SELECT AVG(total\_discount) AS avg\_discount\_per\_transaction

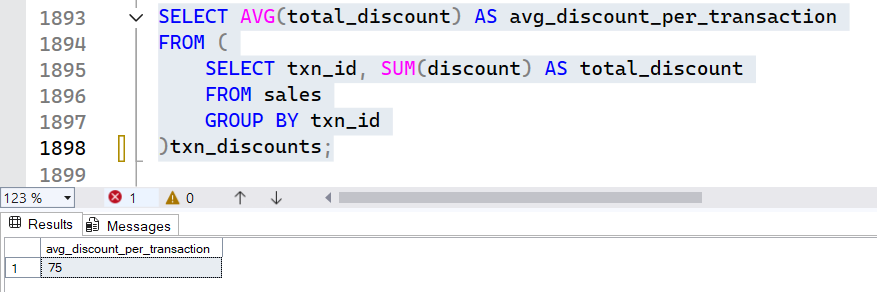
FROM (

SELECT txn\_id, SUM(discount) AS total\_discount

FROM sales

GROUP BY txn\_id

) txn\_discounts;



**Submitted by**

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