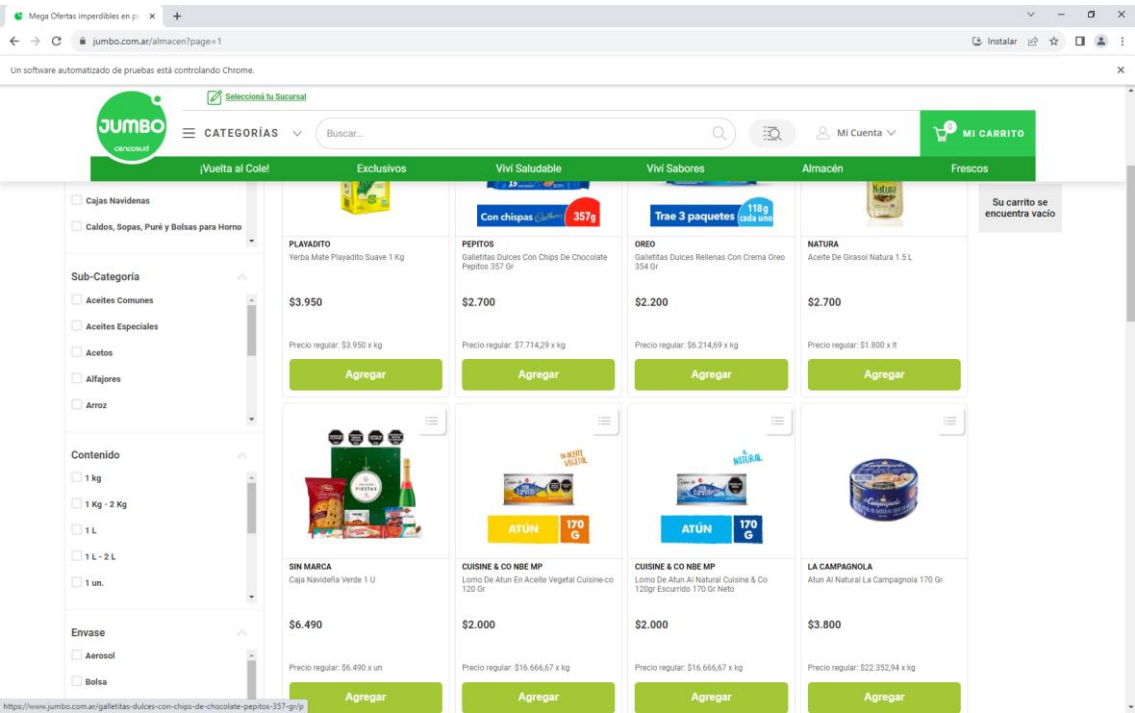
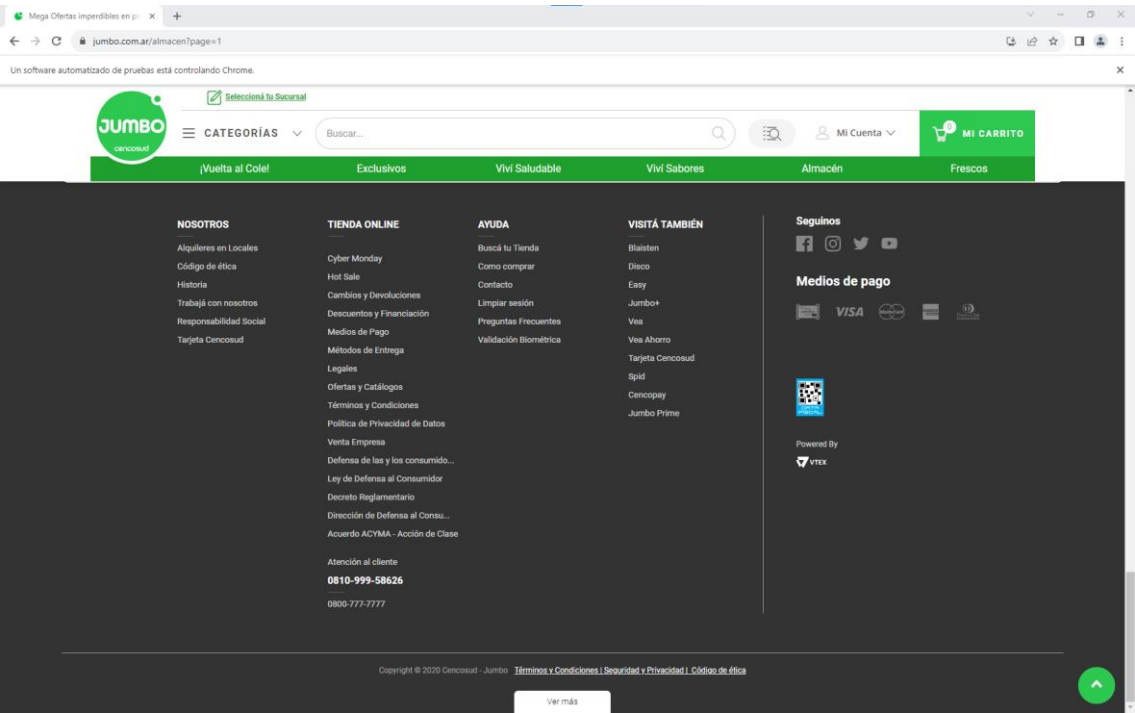


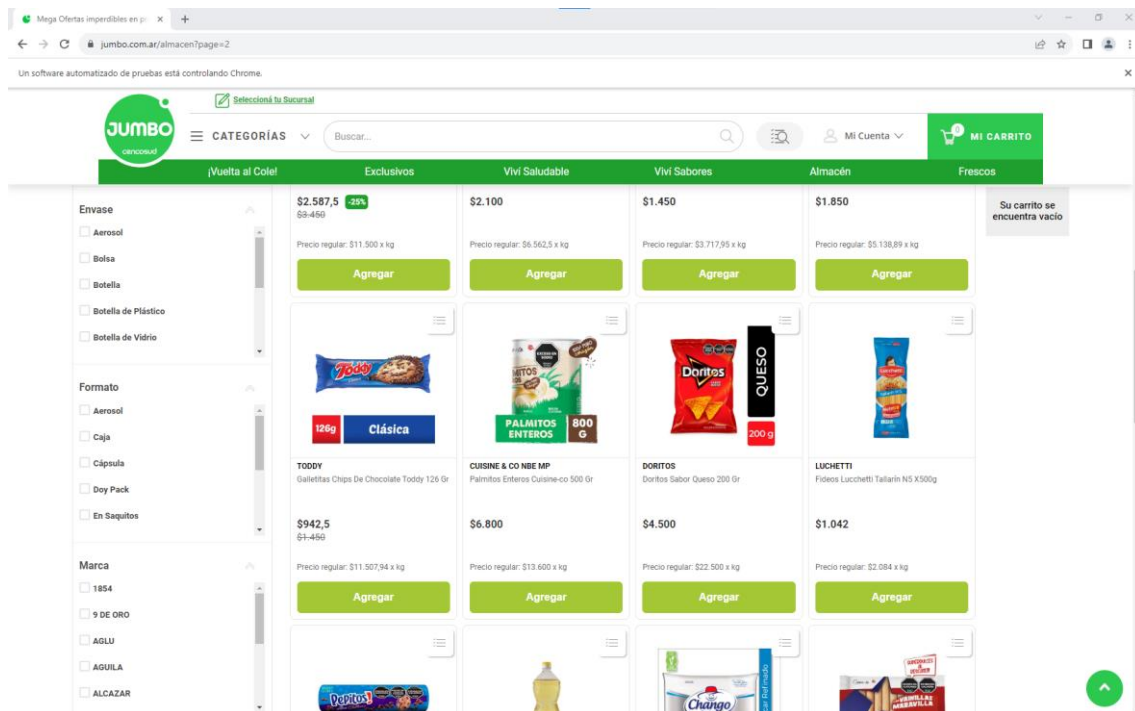
Warehouse page requested.



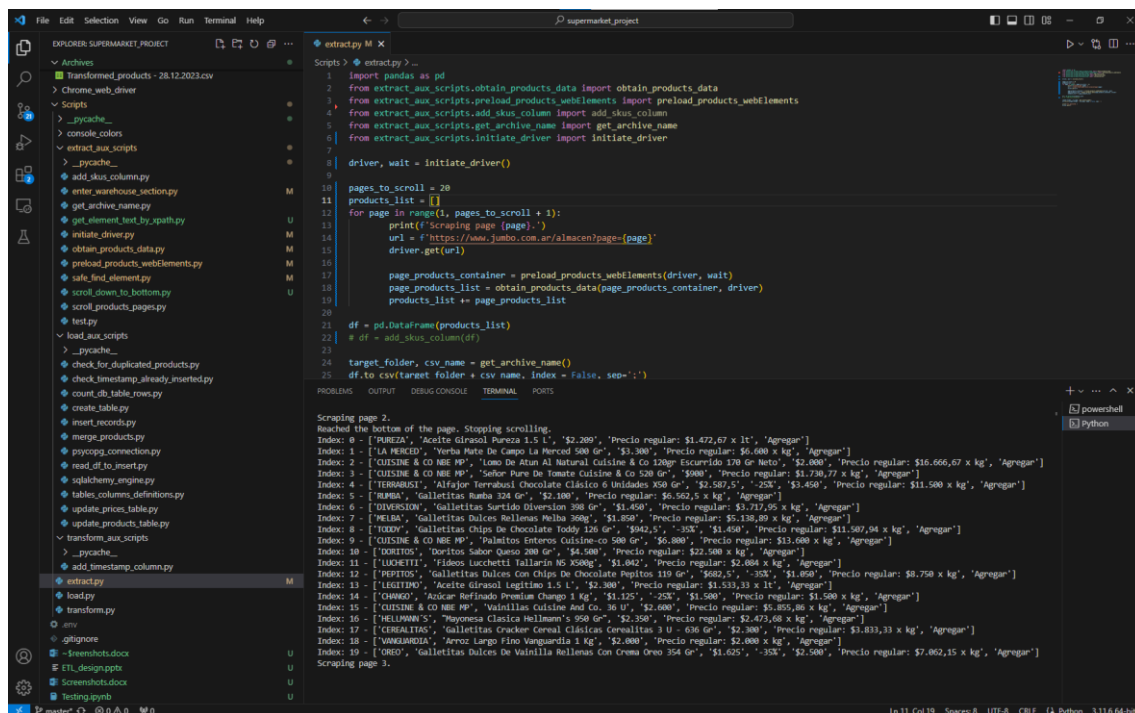
Scroll down to the bottom in order to load products that are dynamically loaded.



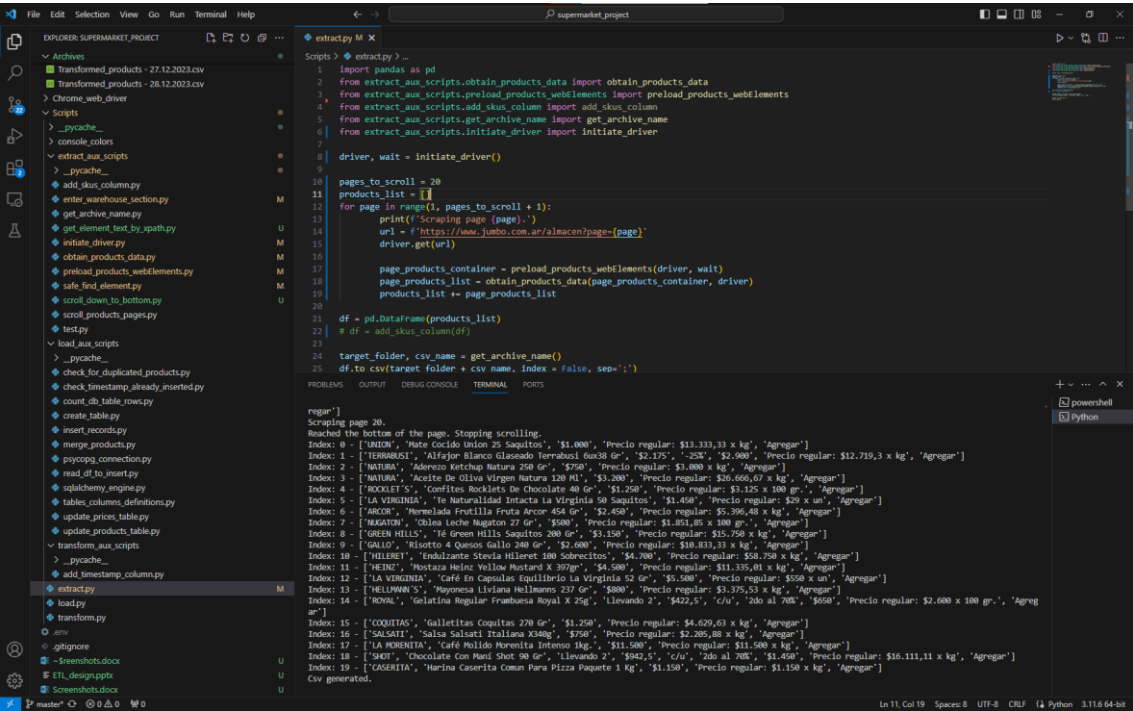
Next page requested after saving page 1 products.



CLI logs.



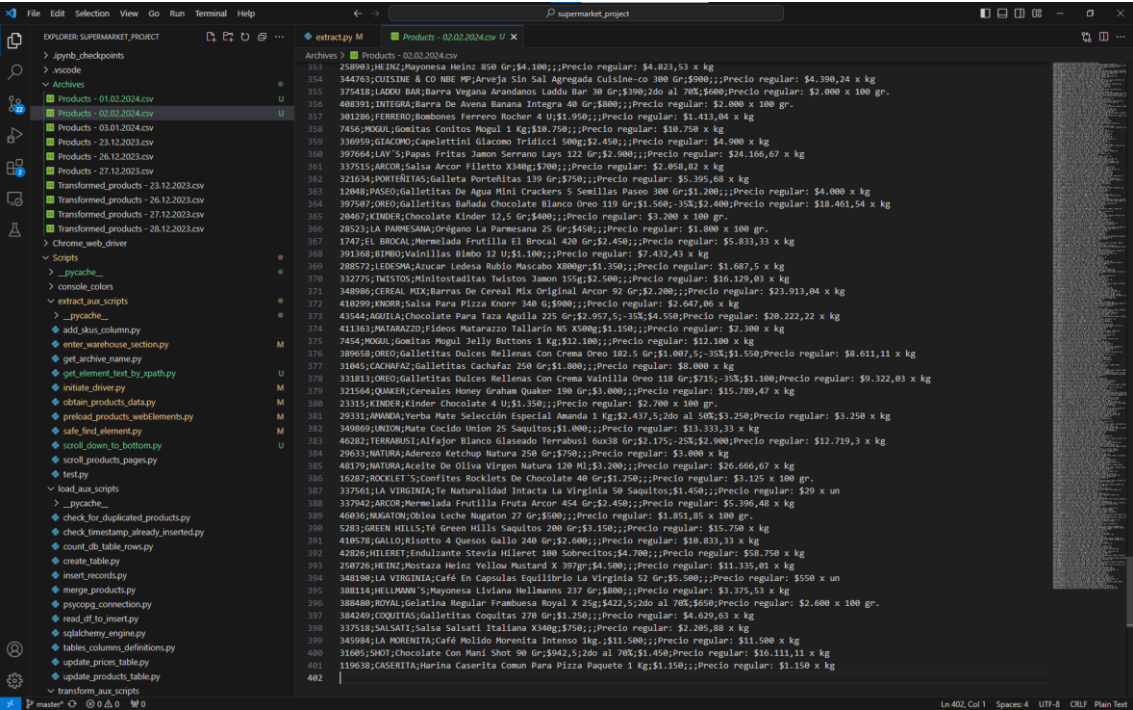
Last page retrieved.



```
1 import pandas as pd
2 from extract_aux_scripts.obtain_products_data import obtain_products_data
3 from extract_aux_scripts.preload_products_weblelements import preload_products_weblelements
4 from extract_aux_scripts.add_sku_column import add_sku_column
5 from extract_aux_scripts.get_archive_name import get_archive_name
6 from extract_aux_scripts.initiate_driver import initiate_driver
7
8 driver, wait = initiate_driver()
9
10 pages_to_scroll = 20
11 products_list = []
12 for page in range(1, pages_to_scroll + 1):
13     print(f'Scraping page {page}')
14     url = f'https://www.jumbo.com.ar/almacenes?page={page}'
15     driver.get(url)
16
17 page_products_container = preload_products_weblelements(driver, wait)
18 page_products_list = obtain_products_data(page_products_container, driver)
19 products_list += page_products_list
20
21 df = pd.DataFrame(products_list)
22 df = add_sku_column(df)
23
24 target_folder, csv_name = get_archive_name()
25 df.to_csv(target_folder + csv_name, index = False, sep=';')
```

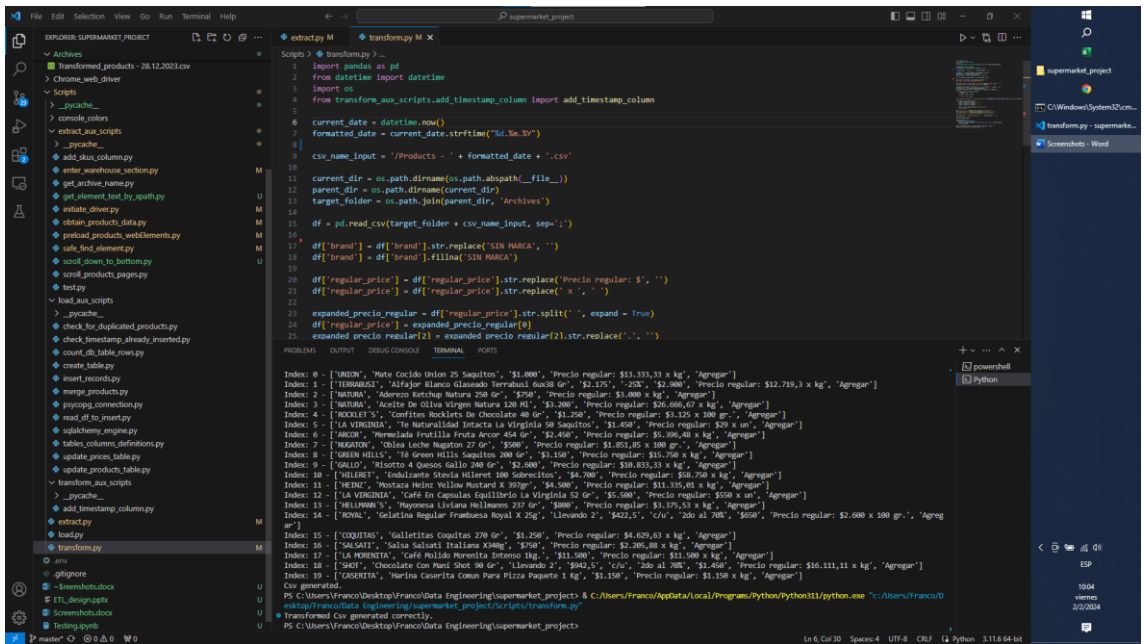
regar']
Reached the bottom of the page. Stopping scrolling.
Index: 0 - ['UNION', 'Mate Cocido Union 25 Saquitos', '\$1.000', 'Precio regular: \$13.333,33 x kg', 'Agregar']
Index: 1 - ['TERRABUSI', 'Alfajor Blanco Glaseado Terrabusi 60x38 Gr', '\$2.175', '-25%', '\$2.900', 'Precio regular: \$12.719,3 x kg', 'Agregar']
Index: 2 - ['NATURA', 'Aderezos Ketchup Natura 250 Gr', '\$750', 'Precio regular: \$3.000 x kg', 'Agregar']
Index: 3 - ['NATURA', 'Aceite De Oliva Virgen Natura 120 Ml', '\$3.250', 'Precio regular: \$26.666,67 x kg', 'Agregar']
Index: 4 - ['ROCKLET', 'Confites Rocklets De Chocolate 40 Gr', '\$1.250', 'Precio regular: \$3.125 x 100 gr', 'Agregar']
Index: 5 - ['LA VIRGINIA', 'Te Naturalidad Intacta La Virginia 50 Saquitos', '\$1.450', 'Precio regular: \$29 x un', 'Agregar']
Index: 6 - ['ARCOS', 'Mermelada Frutilla Fruta Arcos 454 Gr', '\$2.450', 'Precio regular: \$5.396,48 x kg', 'Agregar']
Index: 7 - ['MAGATON', 'Tollas Leche Nugaton 27 Gr', '\$450', 'Precio regular: \$1.453,85 x 100 gr', 'Agregar']
Index: 8 - ['GREEN HILLS', 'Te Green Hills Saquitos 200 Gr', '\$3.150', 'Precio regular: \$15.750 x kg', 'Agregar']
Index: 9 - ['GALLO', 'Risotto 4 Quesos Gallo 240 Gr', '\$2.600', 'Precio regular: \$10.833,33 x kg', 'Agregar']
Index: 10 - ['HILLET', 'Endulzante Stevia Hillet 100 Sobrecitos', '\$4.700', 'Precio regular: \$58.750 x kg', 'Agregar']
Index: 11 - ['HEINZ', 'Mostaza Heinz Yellow Mustard X 307gr', '\$4.500', 'Precio regular: \$11.335,01 x kg', 'Agregar']
Index: 12 - ['LA VIRGINIA', 'Café En Capsulas Equilibrío La Virginia 52 Gr', '\$5.500', 'Precio regular: \$550 x un', 'Agregar']
Index: 13 - ['HELLMANN', 'Mayonesa Liviana Hellmanns 237 Gr', '\$5.800', 'Precio regular: \$3.375,53 x kg', 'Agregar']
Index: 14 - ['ROYAL', 'Gelatina Regular Frambuesa Royal X 25g', 'Lievando 2', '\$422,5', 'C/u', '2do al 70%', '\$650', 'Precio regular: \$2.600 x 100 gr', 'Agregar']
Index: 15 - ['COQUITAS', 'Galletitas Comitas 270 Gr', '\$1.250', 'Precio regular: \$4.620,63 x kg', 'Agregar']
Index: 16 - ['SALSATI', 'Salsa Salsati Italiana XS40g', '\$750', 'Precio regular: \$2.205,88 x kg', 'Agregar']
Index: 17 - ['LA MORENITA', 'Café Molido Morenita Intenso 1kg', '\$11.500', 'Precio regular: \$11.500 x kg', 'Agregar']
Index: 18 - ['SHOT', 'Chocolate Con Mami Shot 90 Gr', '\$942,5', 'C/u', '2do al 70%', '\$1.450', 'Precio regular: \$16.111,11 x kg', 'Agregar']
Index: 19 - ['CASERITA', 'Harina Caserita Coman Para Pizza Paquete 1 kg', '\$1.150', 'Precio regular: \$1.150 x kg', 'Agregar']
Csv generated.

CSV generated with approximately 400 different products and their prices.

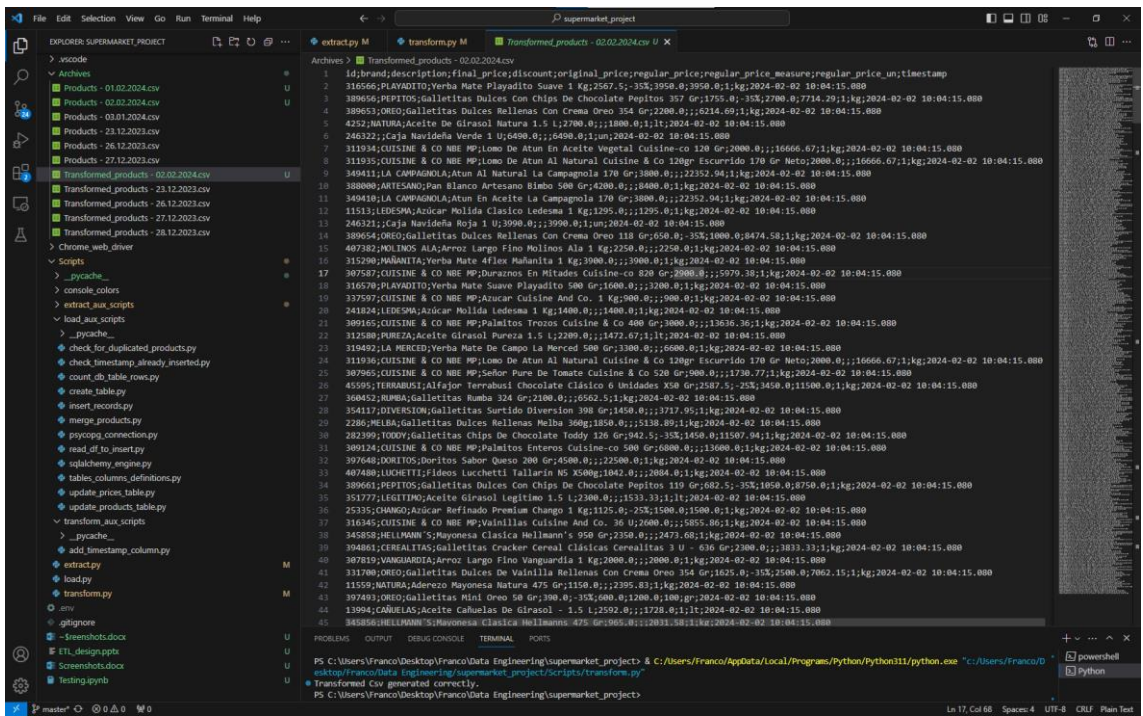


```
353 24803;HEINZ;Mayonesa Heinz 850 Gr;$4.100;;Precio regular: $4.823,53 x kg
354 34473;CUISINE & CO NEE MP;Arvejo Sin Sal Agregada Cuisine-co 300 Gr;$900;;Precio regular: $4.390,24 x kg
355 375418;LADOU BAR;Barra Vegana Arandanos Laddu Bar 30 Gr;$390;2do al 70%;$600;Precio regular: $2.000 x 100 gr.
356 408391;INTEGRA;Barra De Avena Banana Integra 40 Gr;$800;;Precio regular: $2.000 x 100 gr.
357 30126;PERERO;Bombones Favoreo Rucher 4 U;$1.050;;Precio regular: $1.413,04 x kg
358 7456;MODUL;Gonitas Conitos Modul 1 kg;$10;75%;Precio regular: $10.750 x kg
359 336959;GIACOMO;Capelettini Giacomo Tridicci 500g;$2.450;;Precio regular: $4.900 x kg
360 397664;LAY'S;Papas Fritas Jamon Serrano Lays 122 Gr;$2.000;;Precio regular: $24.166,67 x kg
361 337515;ARCOS;Salsa Arcos Filetto XS40g;$700;;Precio regular: $2.058,82 x kg
362 321634;PORTERITAS;Galletas Porteritas 120 Gr;$150;;Precio regular: $5.395,48 x kg
363 12048;PASO;Galletitas De Agua Mini Crackers 5 Semillas Paso 300 Gr;$1.200;;Precio regular: $4.000 x kg
364 397507;OREO;Galletitas Bañada Chocolate Blanco Oreo 119 Gr;$1.500;-35%;$2.400;Precio regular: $18.461,54 x kg
365 20467;KINDER;Chocolate Kinder 12,5 Gr;$400;;Precio regular: $3.200 x 100 gr.
366 2852;LA PARMESANA;Orfigno La Parmesana 25 Gr;$450;;Precio regular: $1.800 x 100 gr.
367 1747;EL BROCAL;Mermelada Frutilla El Brocal 420 Gr;$2.450;;Precio regular: $5.833,33 x kg
368 391368;BIMBO;Vainillas Bimbo 12 U;$1.100;;Precio regular: $7.432,43 x kg
369 288572;LEDESMA;Azucar Ledesa Rubio Mascabo X800gr;$1.350;;Precio regular: $1.687,5 x kg
370 312775;TWISTOS;MiniTwistitos Twistos Jamon 150g;$2.000;;Precio regular: $16.129,03 x kg
371 348906;CEREAL MIX;Barra De Cereal Mix Original Arcos 92 Gr;$2.200;;Precio regular: $23.913,04 x kg
372 410209;KNORR;salsa Para Pizza Knorr 340 G;$900;;Precio regular: $2.647,06 x kg
373 43544;AGUILA;Chocolate Para Taza Aguila 225 Gr;$2.957,5;-35%;$4.550;Precio regular: $20.222,22 x kg
374 411363;PATARAZZO;Fideos Matarazzo Tallarin NS XS50g;$1.150;;Precio regular: $2.300 x kg
375 7454;MODUL;Gonitas Modul Jolly Buttons 1 kg;$12.400;;Precio regular: $12.100 x kg
376 389658;OREO;Galletitas Dulces Hellenas Con Crema Oreo 182,5 Gr;$1.807,5;-10%;$1.550;Precio regular: $8.611,11 x kg
377 31045;CACAHUAT;Galletitas Cachafrat 250 Gr;$1.800;;Precio regular: $8.000 x kg
378 331813;OREO;Galletitas Dulces Hellenas Con Crema Vainilla Oreo 118 Gr;$715;-35%;$1.100;Precio regular: $9.322,03 x kg
379 331504;QUAKER;Cereales Honey Graham Quaker 100 Gr;$3.000;;Precio regular: $15.789,47 x kg
380 23315;KINDER;Kinder Chocolate 4 U;$1.350;;Precio regular: $2.700 x 100 gr.
381 29331;AMANDA;Verba Mate Selección Especial Amanda 1 kg;$2.437,5;2do al 50%;$3.250;Precio regular: $3.250 x kg
382 349869;UNION;Mate Cocido Union 25 Saquitos;$1.000;;Precio regular: $13.333,33 x kg
383 46282;TERRABUSI;Alfajor Blanco Glaseado Terrabusi 60x38 Gr;$2.175;-25%;$2.900;Precio regular: $12.719,3 x kg
384 20633;NATURA;Aderezos Ketchup Natura 250 Gr;$750;;Precio regular: $3.000 x kg
385 48179;NATURA;Aceite De Oliva Virgen Natura 120 Ml;$3.250;;Precio regular: $26.666,67 x kg
386 16287;ROCKLET'S;Confites Rocklets De Chocolate 40 Gr;$1.250;;Precio regular: $3.125 x 100 gr.
387 337561;LA VIRGINIA;Te Naturalidad Intacta La Virginia 50 Saquitos;$1.450;;Precio regular: $29 x un
388 337942;ARCOS;Mermelada Frutilla Fruta Arcos 454 Gr;$2.450;;Precio regular: $5.396,48 x kg
389 46035;MAGATON;Tollas Leche Nugaton 27 Gr;$450;;Precio regular: $1.453,85 x 100 gr.
390 5283;GREEN HILLS;Te Green Hills Saquitos 200 Gr;$3.150;;Precio regular: $15.750 x kg
391 410578;GALLO;Risotto 4 Quesos Gallo 240 Gr;$2.600;;Precio regular: $10.833,33 x kg
392 42826;HILLET;Endulzante Stevia Hillet 100 Sobrecitos;$4.700;;Precio regular: $58.750 x kg
393 28976;HEINZ;Mostaza Heinz Yellow Mustard X 307gr;$4.500;;Precio regular: $11.335,01 x kg
394 384190;LA VIRGINIA;Café En Capsulas Equilibrío La Virginia 52 Gr;$5.500;;Precio regular: $550 x un
395 388114;HELLMANN'S;Mayonesa Liviana Hellmanns 237 Gr;$5.800;;Precio regular: $3.375,53 x kg
396 388480;ROYAL;Gelatina Regular Frambuesa Royal X 25g;$422,5;2do al 70%;$650;Precio regular: $2.600 x 100 gr.
397 384240;COQUITAS;Galletitas Comitas 270 Gr;$1.250;;Precio regular: $4.620,63 x kg
398 337518;SALSATI;Salsa Salsati Italiana XS40g;$750;;Precio regular: $2.205,88 x kg
399 345084;LA MORENITA;Café Molido Morenita Intenso 1kg;$11.500;;Precio regular: $11.500 x kg
400 31605;SHOT;Chocolate Con Mami Shot 90 Gr;$942,5;2do al 70%;$1.450;Precio regular: $16.111,11 x kg
401 119638;CASERITA;Harina Caserita Coman Para Pizza Paquete 1 kg;$1.150;;Precio regular: $1.150 x kg
402
```

Execution of transform script.



Transformed products csv generated.



Raw data vs Transformed data sample

Raw data								
id	brand	description	final_price	discount	original_price	regular_price		
316566	PLAYADITO	Yerba Mate Playadito Suave 1 Kg	\$2.567.50	-35%	\$3.950	Precio regular: \$3.950 x kg		
389656	PEPITOS	Galletitas Dulces Con Chips De Chocolate Pepitos 357 Gr	\$1.755	-35%	\$2.700	Precio regular: \$7.714,29 x kg		
389653	OREO	Galletitas Dulces Rellenas Con Crema Oreo 354 Gr	\$2.200			Precio regular: \$6.214,69 x kg		
4252	NATURA	Acetite De Girasol Natura 1.5 L	\$2.700			Precio regular: \$1.800 x lt		
Transformed data								
id	brand	description	final_price	discount	original_price	regular_price	regular_price_measure	regular_price_un
316566	PLAYADITO	Yerba Mate Playadito Suave 1 Kg	2567.5	-35%	3950.0		1 kg	2024-02-02 10:45:20.303
389656	PEPITOS	Galletitas Dulces Con Chips De Chocolate Pepitos 357 Gr	1755.0	-35%	2700.0		1 kg	2024-02-02 10:45:20.303
389653	OREO	Galletitas Dulces Rellenas Con Crema Oreo 354 Gr	2200.0	0%	2200.0		1 kg	2024-02-02 10:45:20.303
4252	NATURA	Acetite De Girasol Natura 1.5 L	2700.0	0%	2700.0		1 lt	2024-02-02 10:45:20.303
246322	NO BRAND	Caja Navideña Verde 1 U	6490.0	0%	6490.0		1 un	2024-02-02 10:45:20.303
397493	OREO	Galletitas Mini Oreo 50 Gr	390.0	-35%	600.0		100 gr	2024-02-02 10:45:20.303

Load script execution:


```
1 from load_aux_scripts.create_table import create_table
2 from load_aux_scripts.read_df_to_insert import read_df_to_insert
3 from load_aux_scripts.update_products_table import update_products_table
4 from load_aux_scripts.update_prices_table import update_prices_table
5 from load_aux_scripts.tables_columns_definitions import prices_table_columns, products_table_columns
6
7 create_table(
8     name = 'supermarket_prices',
9     type = 'normal',
10    columns_definition = prices_table_columns
11 )
12
13 create_table(
14     name = 'supermarket_products',
15     type = 'normal',
16    columns_definition = products_table_columns
17 )
18
19 df_to_insert = read_df_to_insert()
20 update_products_table(df_to_insert)
21 update_prices_table(df_to_insert)
```

Terminal Output:

```
PS C:\Users\Franco\Desktop\Franco\Data Engineering\supermarket_project> & "C:\Users\Franco\AppData\Local\Programs\Python\Python111\python.exe" "C:\Users\Franco\vscode\extensions\ms-python.python-2021.12.1\python\lib\python\debugpy\adapter\..\..\debugpy\launcher" "debugpy" "--" "C:\Users\Franco\Desktop\Franco\Data Engineering\supermarket_project\Scripts\load.py"
Updating products table.
Data inserted successfully into temporary supermarket_products.
Data merged successfully from temporary table to the original table.
Products with prices today: 400.
New products inserted: 400.
Checking if records from this timestamp are already inserted.
Records not present, they can be inserted.
Prices inventoried: 0.
Prices to insert: 400.
Data inserted successfully into supermarket_prices.
PS C:\Users\Franco\Desktop\Franco\Data Engineering\supermarket_project>
```

Postgres supermarket_products table:

SELECT * FROM supermarket_products Enter a SQL expression to filter results (use Ctrl+Space)				
	sku	product_brand	product_description	timestamp
1	315.800	PLAYADITO	Yerba Mate Playadito Suave 1 Kg	2024-02-02 11:42:04.697
2	387.752	PEPITOS	Galletitas Dulces Con Chips De Chocolate Pepitos 357 Gr	2024-02-02 11:42:04.697
3	387.749	OREO	Galletitas Dulces Rellenas Con Crema Oreo 354 Gr	2024-02-02 11:42:04.697
4	247.337	NATURA	Aceite De Girasol Natura 1.5 L	2024-02-02 11:42:04.697
5	243.209	NO BRAND	Caja Navideña Verde 1 U	2024-02-02 11:42:04.697
6	311.172	CUISINE & CO NBE MP	Lomo De Atun En Aceite Vegetal Cuisine-co 120 Gr	2024-02-02 11:42:04.697
7	311.173	CUISINE & CO NBE MP	Lomo De Atun Al Natural Cuisine & Co 120gr Ecurrido 170 Gr Neto	2024-02-02 11:42:04.697
8	348.071	LA CAMPAGNOLA	Atun Al Natural La Campagnola 170 Gr	2024-02-02 11:42:04.697
9	386.145	ARTESANO	Pan Blanco Artesano Bimbo 500 Gr	2024-02-02 11:42:04.697
10	348.070	LA CAMPAGNOLA	Atun En Aceite La Campagnola 170 Gr	2024-02-02 11:42:04.697
11	8.777	LEDESMA	Azúcar Molida Clasico Ledesma 1 Kg	2024-02-02 11:42:04.697
12	243.208	NO BRAND	Caja Navideña Roja 1 U	2024-02-02 11:42:04.697
13	387.750	OREO	Galletitas Dulces Rellenas Con Crema Oreo 118 Gr	2024-02-02 11:42:04.697
14	403.571	MOLINOS ALA	Arroz Largo Fino Molinos Ala 1 Kg	2024-02-02 11:42:04.697
15	314.524	MAÑANITA	Yerba Mate 4flex Mañanita 1 Kg	2024-02-02 11:42:04.697
16	306.824	CUISINE & CO NBE MP	Duraznos En Mitades Cuisine-co 820 Gr	2024-02-02 11:42:04.697
17	315.804	PLAYADITO	Yerba Mate Suave Playadito 500 Gr	2024-02-02 11:42:04.697

123 count
1 400

Postgres supermarket_prices table:

	sku	123 final_price	123 original_price	123 discount	123 regular_price	123 regular_price_measure	123 regular_price_un	timestamp
1	315.800	2.567,5	3.950	-35%	3.950	1	kg	2024-02-02 11:42:04.697
2	387.752	1.755	2.700	-35%	7.714,29	1	kg	2024-02-02 11:42:04.697
3	387.749	2.200	2.200	0%	6.214,69	1	kg	2024-02-02 11:42:04.697
4	247.337	2.700	2.700	0%	1.800	1	lt	2024-02-02 11:42:04.697
5	243.209	6.490	6.490	0%	6.490	1	un	2024-02-02 11:42:04.697
6	311.172	2.000	2.000	0%	16.666,67	1	kg	2024-02-02 11:42:04.697
7	311.173	2.000	2.000	0%	16.666,67	1	kg	2024-02-02 11:42:04.697
8	348.071	3.800	3.800	0%	22.352,94	1	kg	2024-02-02 11:42:04.697
9	386.145	4.200	4.200	0%	8.400	1	kg	2024-02-02 11:42:04.697
10	348.070	3.800	3.800	0%	22.352,94	1	kg	2024-02-02 11:42:04.697
11	8.777	1.295	1.295	0%	1.295	1	kg	2024-02-02 11:42:04.697
12	243.208	3.990	3.990	0%	3.990	1	un	2024-02-02 11:42:04.697
13	387.750	650	1.000	0%	8.474,58	1	kg	2024-02-02 11:42:04.697
14	403.571	2.250	2.250	0%	2.250	1	kg	2024-02-02 11:42:04.697
15	314.524	3.900	3.900	0%	3.900	1	kg	2024-02-02 11:42:04.697
16	306.824	2.900	2.900	0%	5.979,38	1	kg	2024-02-02 11:42:04.697
17	315.804	1.600	1.600	0%	3.200	1	kg	2024-02-02 11:42:04.697

Resultados 1	
SELECT count(*) FROM supermarket_prices	
123 count	
400	

Now I will upload an archive from a past date: 'Transformed_products - 27.12.2023'. It has 804 product prices.

```
PS C:\Users\Franco\Desktop\Franco\Data_Engineering\supermarket_project> cd 'c:\Users\Franco\Desktop\Franco\Data_Engineering\supermarket_project'; & 'C:\Users\Franco\AppData\Local\Programs\Python\Python311\python.exe' 'c:\Users\Franco\.vscode\extensions\ms-python.python-2023.22.1\pythonFiles\lib\python\debugpy\adapter\..\..\debugpy\launcher' '49843' '-.' 'C:\Users\Franco\Desktop\Franco\Data_Engineering\supermarket_project\Scripts\load.py'
Updating products table.
Current inventoried products: 400
Products with prices today: 804.
Data inserted successfully into temporary_supermarket_products.
Data merged successfully from temporary table to the original table.
Products inventory updated: 895.
New products inserted: 495.
Checking if records from this timestamp are already inserted.
Records not present, they can be inserted.
Prices inventoried: 400.
Prices to insert: 804
Data inserted successfully into supermarket_prices.
PS C:\Users\Franco\Desktop\Franco\Data_Engineering\supermarket_project>
```

The script identified correctly new products in order to insert only those.

SELECT count(*) FROM supermarket_products	
123 count	
895	

The script loaded all new prices.

SELECT count(*) FROM supermarket_prices	
123 count	
1.204	

We can find products that were present in both archives in order to check prices difference:

Top 10 products with more than one price AS 12/02/2024 11:51								
Enter a SQL expression to filter results (use Ctrl+Space)								
	sku	product_brand	product_description	final_price	price_change	price_change_percentage	timestamp	
1	440	EL BROCAL	Mermelada Frutilla El Brocal 420 Gr	1.985,36	[NULL]	[NULL]	2023-12-27 14:41:54.478	
2	440	EL BROCAL	Mermelada Frutilla El Brocal 420 Gr	2.450	464,64	23.40%	2024-02-02 11:51:18.952	
3	638	BON O BON	Oblea Bañada Rhodesia 22 Gr	305	[NULL]	[NULL]	2023-12-27 14:41:54.478	
4	638	BON O BON	Oblea Bañada Rhodesia 22 Gr	600	295	96.72%	2024-02-02 11:51:18.952	
5	2.219	CASERITA	Harina Caserita 000 1 Kg	581	[NULL]	[NULL]	2023-12-27 14:41:54.478	
6	2.219	CASERITA	Harina Caserita 000 1 Kg	590	9	1.55%	2024-02-02 11:51:18.952	
7	2.351	BONAFIDE	Café Bonafide Molido Sensaciones 250 Gr	1.520,93	[NULL]	[NULL]	2023-12-27 14:41:54.478	
8	2.351	BONAFIDE	Café Bonafide Molido Sensaciones 250 Gr	2.900	1.379,07	90.67%	2024-02-02 11:51:18.952	
9	2.362	CASERITA	Harina Caserita Leudante 1 Kg	872	[NULL]	[NULL]	2023-12-27 14:41:54.478	
10	2.362	CASERITA	Harina Caserita Leudante 1 Kg	890	18	2.06%	2024-02-02 11:51:18.952	
11	2.744	SALADIX	Galletitas Saladix Pizza 100 Gr	599	[NULL]	[NULL]	2023-12-27 14:41:54.478	
12	2.744	SALADIX	Galletitas Saladix Pizza 100 Gr	1.050	451	75.29%	2024-02-02 11:51:18.952	
13	2.758	FERRERO	Bombones Ferrero Rocher 24 U	5.062,36	[NULL]	[NULL]	2023-12-27 14:41:54.478	
14	2.758	FERRERO	Bombones Ferrero Rocher 24 U	11.500	6.437,64	127.17%	2024-02-02 11:51:18.952	
15	2.772	GREEN HILLS	Té Green Hills- 50 Saquitos	1.152,98	[NULL]	[NULL]	2023-12-27 14:41:54.478	
16	2.772	GREEN HILLS	Té Green Hills- 50 Saquitos	1.200	47,02	4.08%	2024-02-02 11:51:18.952	

Top 10 products with highest increase:

Top 10 products with more than one price AS 12/02/2024 11:51								
Enter a SQL expression to filter results (use Ctrl+Space)								
	sku	product_brand	product_description	final_price	price_change	price_change_percentage	timestamp	
1	306.824	CUISINE & CO NBE MP	Duraznos En Mitades Cuisine-co 820 Gr	2.900	2.056,3	243.72%	2024-02-02 11:51:18.952	
2	389.911	ROYAL	Flan Vainilla Royal 60 Gr	500	349	231.13%	2024-02-02 11:51:18.952	
3	344.847	MAGGI	Caldo De Verdura X 6u.	500	339,66	211.84%	2024-02-02 11:51:18.952	
4	21.198	REX	Galletitas Rex Original 125 Gr	1.400	923	193.50%	2024-02-02 11:51:18.952	
5	42.596	REX	Galletitas Tubo Rex Original 75 Gr	1.000	648	184.09%	2024-02-02 11:51:18.952	
6	330.053	SONRISAS	Galletitas Frambuesa Sonrisas 108 Gr	900	565	168.66%	2024-02-02 11:51:18.952	
7	17.639	KINDER	Chocolate Kinder 12.5 Gr	400	246,72	160.96%	2024-02-02 11:51:18.952	
8	392.418	NESQUIK	Cereal Nesquik® 400 Gr	6.100	3.754,24	160.04%	2024-02-02 11:51:18.952	
9	34.405	TIC TAC	Pastillas Tic Tac Mix De Frutas 33 U	450	273,93	155.58%	2024-02-02 11:51:18.952	
10	384.398	CHEF	Puré Chef Nestlé 100 Gr	1.500	908	153.38%	2024-02-02 11:51:18.952	

Top 10 products with highest decrease:

Top 10 products with more than one price AS 12/02/2024 11:51								
Enter a SQL expression to filter results (use Ctrl+Space)								
	sku	product_brand	product_description	final_price	price_change	price_change_percentage	timestamp	
1	403.654	MATARAZZO	Fideos Matarazzo Tirabuzón N34 X500g	910	-382	-29.57%	2024-02-02 11:51:18.952	
2	336.700	CUISINE & CO NBE MP	Azúcar Cuisine And Co. 1 Kg	900	-328,75	-26.75%	2024-02-02 11:51:18.952	
3	298.427	MAXIMA MP	Atún Desmenuzado En Agua Y En Aceite Iv	900	-315	-25.93%	2024-02-02 11:51:18.952	
4	27.436	LA ESPAÑOLA GOURMET	Lentejas Gourmet La Española 400 Gr	600	-203,45	-25.32%	2024-02-02 11:51:18.952	
5	374.145	LADDU BAR	Barra Vegana Frutos Rojos Laddu Bar 30 Gr	390	-88	-18.41%	2024-02-02 11:51:18.952	
6	374.136	LADDU BAR	Barra Vegana Arandanos Laddu Bar 30 Gr	390	-88	-18.41%	2024-02-02 11:51:18.952	
7	374.131	LADDU BAR	Barra Vegana Brownie Laddu Bar 30 Gr	390	-88	-18.41%	2024-02-02 11:51:18.952	
8	2.817	9 DE ORO	Bizcochos De Grasa 9 De Oro 200 Gr	850	-187	-18.03%	2024-02-02 11:51:18.952	
9	10.339	9 DE ORO	Bizcochos Agridulces 9 De Oro 200 Gr	850	-187	-18.03%	2024-02-02 11:51:18.952	
10	46.317	CACHAFAZ	Alfajores Cachafaz Negros 360g	4.837,5	-1.026,5	-17.51%	2024-02-02 11:51:18.952	

SQL scripts used are saved in 'supermarket_project\Scripts\SQL'.