Jaime Andres Diaz Crosthwait
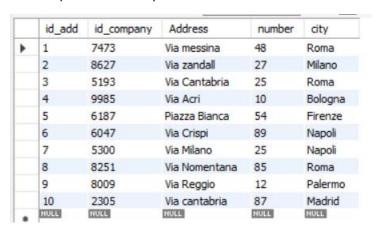
Final Case SQL Module

Description

To develop the following case, I choose to create a fictional company that sells Automobile and motorcycle spare parts. The company is called GHA and operates in the Italian market.
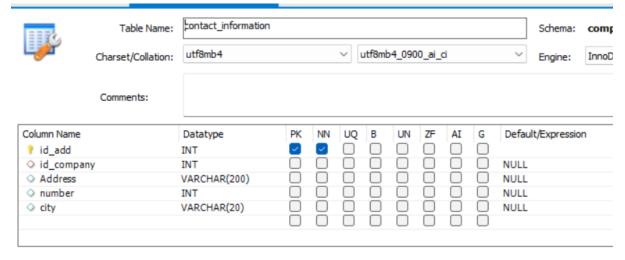
So, as business data analyst I have to perform some sale analysis over the year 2022, to enlighten how the company and its sales representatives performed over the year.

I created a database in SQL workbench called "**Company sales**" holding seven tables within the database:

The data is fictional, all these information is created by me for final module exercise solely.
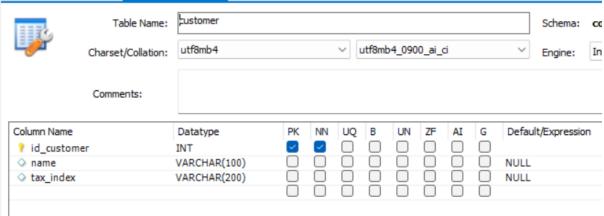
1. **Contact Information:** Contains the contact information for each of the reseller (Customers) companies for GHA products.
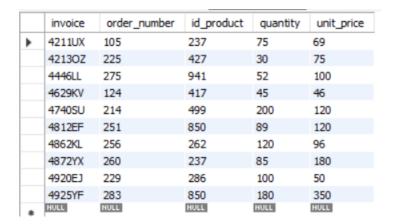
2. **Customer:** Contains the id, name and the taxation code for each reseller company

id_customer	name	tax_index
2305	Cafe Twin	630lter27
5193	Europarts	806rcs24
5300	Diesel N20	829wtl27
6047	Pista 24	728dyw8
6187	Euroshell	293xop11
7473	Bristol	703xlk9
8009	Moto Ricambi	769qsd25
8251	Race Cafe	771jab10
8627	Biking Reggio	814vyu26
9985	Auto 24	180wik48

Table Name: customer   Schema: cc

Charset/Collation: utf8mb4   utf8mb4_0900_ai_ci   Engine: In

Comments:

Column Name	Datatype	PK	NN	UQ	B	UN	ZF	AI	G	Default/Expression
id_customer	INT	☑	☑	☐	☐	☐	☐	☐	☐	
name	VARCHAR(100)	☐	☐	☐	☐	☐	☐	☐	☐	NULL
tax_index	VARCHAR(200)	☐	☐	☐	☐	☐	☐	☐	☐	NULL
		☐	☐	☐	☐	☐	☐	☐	☐	

3. **Order Placed:** Contains the information for each placed order (Sell), which means that every time the company sells an order to the customer each order will be attached to an invoice number.

invoice	order_number	id_product	quantity	unit_price
4211UX	105	237	75	69
4213OZ	225	427	30	75
4446LL	275	941	52	100
4629KV	124	417	45	46
4740SU	214	499	200	120
4812EF	251	850	89	120
4862KL	256	262	120	96
4872YX	260	237	85	180
4920EJ	229	286	100	50
4925YF	283	850	180	350
NULL	NULL	NULL	NULL	NULL

Table Name: order_placed   **Schema:**

Charset/Collation: utf8mb4   utf8mb4_0900_ai_ci   **Engine:**

Comments:

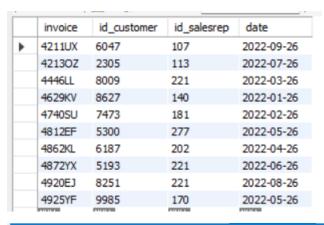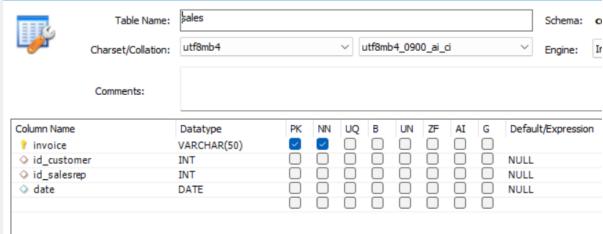| Column Name	Datatype	PK	NN	UQ	B	UN	ZF	AI	G	Default/Expression
🔑 invoice	VARCHAR(50)	☑	☑	☐	☐	☐	☐	☐	☐	
🔑 order_number	INT	☑	☑	☐	☐	☐	☐	☐	☐	
◇ id_product	INT	☐	☐	☐	☐	☐	☐	☐	☐	NULL
◇ quantity	INT	☐	☐	☐	☐	☐	☐	☐	☐	NULL
◇ unit_price	INT	☐	☐	☐	☐	☐	☐	☐	☐	NULL
		☐	☐	☐	☐	☐	☐	☐	☐	

4. **Product:** Contains a general information for every and each product that the company offers on the Italian market. Also, has the information about the supplier id and the stock existence.
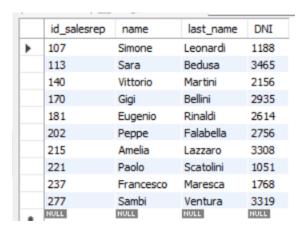
id_product	name	description	current_status	id_supplier
237	Beta	Starter	No Stock	589683
262	Echo	Ignition Coil	No Stock	501408
286	Charlie	Bendix	Stock	982926
406	Jupiter	Speedometer	Stock	121160
417	Hotel	Alternator Pulley	Stock	876999
427	Delta	Regulator	No Stock	490248
499	Fox	Armature	Stock	97259
508	India	Brake Pads	stock	923765
850	Alpha	Alternator	stock	606216
941	Golf	Spark Plug	Stock	810729

Table Name: product   **Schema:** co

Charset/Collation: utf8mb4   utf8mb4_0900_ai_ci   **Engine:** In

Comments:

Column Name	Datatype	PK	NN	UQ	B	UN	ZF	AI	G	Default/Expression
🔑 id_product	INT	☑	☑	☐	☐	☐	☐	☐	☐	
◇ name	VARCHAR(100)	☐	☐	☐	☐	☐	☐	☐	☐	NULL
◇ description	VARCHAR(100)	☐	☐	☐	☐	☐	☐	☐	☐	NULL
◇ current_status	VARCHAR(100)	☐	☐	☐	☐	☐	☐	☐	☐	NULL
◆ id_supplier	INT	☐	☑	☐	☐	☐	☐	☐	☐	
		☐	☐	☐	☐	☐	☐	☐	☐	

5. **Sales:** The different sales information over the year 2022.

invoice	id_customer	id_salesrep	date
4211UX	6047	107	2022-09-26
4213OZ	2305	113	2022-07-26
4446LL	8009	221	2022-03-26
4629KV	8627	140	2022-01-26
4740SU	7473	181	2022-02-26
4812EF	5300	277	2022-05-26
4862KL	6187	202	2022-04-26
4872YX	5193	221	2022-06-26
4920EJ	8251	221	2022-08-26
4925YF	9985	170	2022-05-26

Table Name: sales   Schema: o

Charset/Collation: utf8mb4   utf8mb4_0900_ai_ci   Engine: In

Comments:

Column Name	Datatype	PK	NN	UQ	B	UN	ZF	AI	G	Default/Expression
invoice	VARCHAR(50)	☑	☑	☐	☐	☐	☐	☐	☐	
id_customer	INT	☐	☐	☐	☐	☐	☐	☐	☐	NULL
id_salesrep	INT	☐	☐	☐	☐	☐	☐	☐	☐	NULL
date	DATE	☐	☐	☐	☐	☐	☐	☐	☐	NULL
		☐	☐	☐	☐	☐	☐	☐	☐	

6. **Sales Representative:** Contains the information of the sales representatives of GHA company.

id_salesrep	name	last_name	DNI
107	Simone	Leonardi	1188
113	Sara	Bedusa	3465
140	Vittorio	Martini	2156
170	Gigi	Bellini	2935
181	Eugenio	Rinaldi	2614
202	Peppe	Falabella	2756
215	Amelia	Lazzaro	3308
221	Paolo	Scatolini	1051
237	Francesco	Maresca	1768
277	Sambi	Ventura	3319
NULL	NULL	NULL	NULL

7. **Supplier:** Contains the id and name information of each supplier of GHA company

Queries for analysis

As a junior business analyst, I've been asked to perform some SQL queries to be shared with the board for them to have a better idea of how GHA performed last year(2022).

The board needs to know:

1. How many products are in the catalogue?
2. How many products are in Stock? it is important to remark that it refers to product existence itself not to quantity existence.

3. Which products have never been sold?
4. How many units were sold for each product?
5. What is the average number of units sold of each product?
6. Who is the top seller representative?
7. List all products for which more than 120 units have been sold?
8. Which are the resellers or customers located in Rome?