9 Types of NoSQL Databases – Exercises

Below you find a list of 12 use cases. Indicate each time with which type of database you can obtain the optimal storage, by putting a cross in the corresponding column. There is only one answer possible.
Abbreviations used:
DOC = document database
COL = column store
KV = key/value
GRA = graph database
REL = relational database

	DOC	COL	KV	GRA	REL
The Belgian contact tracing during the corona pandemic shows all kinds of flaws. One of the reasons is said to be that, due to an incorrect choice of database, it is very difficult to trace contacts of an infected person to any degree, e.g. who are the contacts of a person's contacts? What would be the optimal storage type for this?					
A modern car contains hundreds of sensors that take measurements at a very high frequency. These consist of an identification of the car, a timestamp, an identification of the sensor and a measured value. Every day, the measurement results are sent via a mobile network to the manufacturer for analysis. Nothing else happens with this data in the car.					
A report generator imports data from a data warehouse to make aggregations across cubes with multiple dimensions very quickly.					
Users of a website can freely fill in all kinds of personal data and preferences during registration. On average, a user fills in only 40 % of the available fields.					
The cash register system of a supermarket with hundreds of shops, each with up to dozens of cash registers, must be able to scan products, print out receipts, collect payments and adjust stock levels in real time very quickly and accurately.					
You visit a trade fair and receive a business card from the vendor at each stand. The cards all have a number of recurrent fields (name, company name, ...) but also many fields that appear on one or just a few of the cards (Twitter account, mobile number, ...).					
A reporting tool such as PowerBI works with data from a data warehouse to very quickly create aggregations across cubes with multiple dimensions.					
Credit card fraud detection on webshops involves keeping track of relationships between names, dates of birth, addresses, devices and times. It must be possible to easily add new types of relationships.					
The catalogue of an online shop contains many categories, sub-categories, sub-sub-categories, etc. The number of levels is not fixed; moreover, categories often change.					
The pages in a computer's cache all have a unique number and must be retrieved very quickly.					

A restaurant review site keeps track of reviews of different types of restaurants. For each type of restaurant, different characteristics may be recorded. Moreover, users themselves can add new types of restaurants (e.g. pop-up bars).					
You want to keep accurate records of orders, deliveries, stocks and invoices.					