1. What is a primary key? Provide characteristics and an example for what type of field could be used, and what type of field should NOT be used as a primary key. Does each table need a primary key? Why or why not??

A primary key is a column of data that contains a unique key for each record. An example of a primary key would be a sales id column. The sales id is unique to each transaction or record in the table. If a new transaction occurs the sales id is incremented by 1 so no duplicates exists. A field that would not be used as a primary key would be the amount field. In this example, the amount is the price of the item the customer pays for. A price isn’t unique, so if someone was looking for a particular transaction, an order that costs the same would make the search difficult.

Each table does not need a primary key, but each table can have a primary key. A table can contain a list of data such as a table with car specifications. You would not need a primary key for this table as it contains data such as color, model, manufacturer and each type of car does not to be unique. You could link the table with one that holds a customer\_id table, but the car table can function without one.

References

<https://www.techopedia.com/definition/5547/primary-key>

<https://support.microsoft.com/en-gb/office/add-or-change-a-table-s-primary-key-in-access-07b4a84b-0063-4d56-8b00-65f2975e4379#:~:text=Often%2C%20a%20unique%20identification%20number,field%20is%20the%20primary%20key>.

https://www.ibm.com/docs/en/doc/3.9.1.0?topic=model-defining-primary-keyforeign-key-relationships