Interview Questions

Q 1. What kind of data structure is an index? (Adobe)
In most of the cases, B-Tree data structure is used to store the indexes. This is because of the time efficiency of B-Trees. In other words, B-trees are traversed, searched, inserted, deleted and updated in logarithmic time.

Q 2. A table can have multiple non-clustered indexes, but only one clustered index. Why?(Amazon)
If a table has a clustered index, then its records are sorted based on the column on which the clustered index is created. Therefore, if we create multiple clustered indexes, we cannot sort the table record for all those columns. Only one time sorting based on one column for which clustering is done is valid.

Q 3.What is index and types of index?
Two main types of indexing methods are 1)Primary Indexing 2) Secondary Indexing.

Q 4.Is the primary key clustered index? (Goldman Sachs)
A primary key is a unique index that is clustered by default. By default means that when you create a primary key, if the table is not clustered yet, the primary key will be created as a clustered unique index.

Q 5.Why are B tree indexes popular? (Mastercard)
The B-tree enables the database to find a leaf node quickly. The tree traversal is a very efficient operation so efficient that I refer to it as the first power of indexing. It works almost instantly even on a huge data set.