



## Career Services Assignment 6 – SQL Flash Cards

**Instructions:** Research common SQL interview questions online and create 20 flash cards from the information you find. Study your flash cards regularly to better prepare for interviews. Fill out the table below with the information you put on each of your flash cards.

Front of Card	Back of Card
What is the SQL acronym, what does it mean?	It stands for Structured Query Language. Structured refers to the type of database (relational databases), and the language exists to query the information in the database.
What is a table comprised of?	A table is made up of fields, which are like spreadsheet columns. Each column has an assigned data type, that all data in that field will be.
What is a primary key?	A primary key is the field in a table that has values that can uniquely identify exactly 1 record in the table. For example, an employee ID.
What is a foreign key?	A foreign key is a field that associates one table to another. For example, a table with a list of all employees working a certain store would have employee ID as the foreign key, relating it to all employees in the company.
What is a unique key?	A unique key is a single or combination of fields that ensure all the values stored in the column are unique. It can accept one null value per column and cannot accept duplicates.
Differences between primary and unique keys?	They can both act as the unique identifier for the record, but the unique key only does this when the primary key is not present. The primary key cannot store a null value. The primary key can't be changed or deleted, the columns of the unique key can be modified.
What is a database?	A database is an organized collection of data that is structured into tables, rows, columns, and indexes. They can manage a large amount of data, are easy to update, and secure.
What is RDBMS?	RDBMS stands for Relational Database Management System. It's based on a



## Career Services Assignment 6 – SQL Flash Cards

	relational model that links the table together with relational operations. MySQL is a RSBMS.
What is an Index in SQL?	An index creates a unique entry for each value which makes it faster to retrieve data. (kind of like a table of contents in a book that allows you to go right to the page you need)
What is a clustered index?	A clustered index is the index of a table. (Like the chapter of a book) Each table can have only one and it's automatically generated when the primary key is generated.
What is the SQL query to show the current date?	There is a function called GetDate() which returns the current timestamp.
What is a 'TRIGGER' in SQL?	A trigger is a set of SQL statements that is stored in a system catalog that is invoked automatically in response to an event.
What are the 4 set operations in SQL?	The set operations merge data from one or more tables of the same kind. They combine rows from different queries.
1. UNION	It combines two or more results from multiple SELECT queries into a single result set. It has a default feature to remove all the duplicate rows.
2. UNION ALL	Same as UNION, but does not remove the duplicate rows.
3. INTERSECT	It returns the common records from two or more SELECT statements. The numbers of columns and data types should be the same. It retrieves unique records and arranges them in ascending order by default.
4. MINUS	It returns the records from the first query that are not found in the second query. It doesn't return duplicate values.
What is SQL Injection?	SQL injection is a type of vulnerability in websites and web app code that allows attackers to control back-end operations and access, retrieve, and destroy sensitive data from databases. Malicious SQL statements are inserted into a database entry field, and once they are performed, the database becomes vulnerable to an attacker. This technique is commonly used to access



## Career Services Assignment 6 – SQL Flash Cards

	sensitive data and perform administrative activities on databases by exploiting data-driven applications.
Column Level Constraints	Constraints that are only applied to a single column and limit the type of data that can be stored in that column.
Table Level Constraints	Constraints that are applied to the entire table and limit the type of data that can be entered.