



Career Services Assignment 6 – SQL Flash Cards

Points possible: 50

Category	Criteria	% of Grade
Completeness	All requirements of the assignment are complete.	100

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
1. What is DBMS?	Database Management System. DMBS is a software system that is responsible for the creation, retrieval, update/change, and deletion (CRUD) of data inside of a database. It helps us easily access our data and serves as an interface between a database and its users or application software.
2. What is a database?	A collection of data that is stored and retrieved digitally.
3. What is SQL?	SQL stands for structured query language. It is a language used for retrieving and manipulating data (CRUD)
4. What is MySQL?	It's a relational database management (RDBMS) system that manages databases. MySQL stores data in a collection(s) of table(s) where relations between tables can be created through common shared fields.
5. What are Constraints in SQL? Name some different Constraints.	Constraints are terms used on data in a table that specify certain rules upon that data. Certain constraints may include primary key, foreign key, not null, and auto-increment.
6. What is a primary key?	It is a unique identifier for data in a row, or each record in a table. A table may have only one primary key which may contain one or multiple columns. Primary keys can help create foreign keys and join tables together.



7. What is a foreign key?	A foreign key is a single or collection of rows in a table that refers to the primary key of another table.
8. What is a join?	A join is a SQL clause that combines and connects rows of tables together based upon a common/shared column (foreign key, primary key) that exists between the tables. Different examples include an inner join, left join, right join, and full (outer) join.
9. What is a Query?	A request for data inside a database table(s).
10. What are the different operators that exist in SQL?	Arithmetic operators, logical operators, and comparison operators.
11. What is auto_increment?	It is a feature that automatically generates a numerical primary key value for every newly inserted row.
12. What is the ALIAS command?	They are temporary names given to data names which may help us create more concise and thoughtful data names when queries are executed.
13. What is the SQL Having statement?	Having is used to specify a condition for an aggregate or group function inside of a select statement. It selects rows after grouping. Having statements are used in aggregate functions. Where statements can not contain aggregate functions.
14. What are between statements in SQL?	The between condition allows a user to test an expression within or between a certain set of values. The values can be dates, numbers, or textual data. It return rows where the expression is within the between range of two values.
15. Are null values the same as zero or blank space in SQL?	Null means that data may not be provided or there is no data that exists. Zero or blank space can be compared with another zero or blank space whereas one null may not always be equal to another null value.
16. What is the SQL query to display the current date?	CURRENT_DATE
17. What is SQL injection?	It occurs when our code includes user input as part of a SQL query and the user adds data to alter the intended functionality of the query. With this, a user may be able to steal or manipulate our data in a malicious way. We can prevent this from happening by creating prepared statements.



18. When did SQL first appear?	First appeared in 1974 and is one of the most used languages for maintaining relational databases.
19. Does SQL support programming language features?	No, it can not be used for anything other than data management/manipulation.
20. What are the different types of database management systems?	DBMS, network databases (IDMS), relational databases (RDBMS like MySQL), object-oriented databases, document databases, graph databases, ER model databases, NoSQL databases.

SOURCES:

<https://www.interviewbit.com/sql-interview-questions/>

https://www.w3schools.com/sql/sql_primarykey.ASP

<https://www.geeksforgeeks.org/sql-interview-questions/>

<https://www.javatpoint.com/sql-interview-questions>