**SQL QA**

1. **How do you retrieve all records from a table named "employees" in SQL?**

To retrieve all records from a table named "employees" in SQL, you can use the SELECT statement without any specific conditions. Here's the SQL query to do that:

SELECT \* FROM employees;

1. **What is the difference between the SQL statements SELECT and UPDATE?**

The SELECT statement is used to retrieve data from one or more database tables. It doesn't modify the data in the tables; instead, it reads and presents the data to the user or application.

SELECT first\_name, last\_name FROM employees WHERE department = 'HR';

The UPDATE statement is used to modify existing data in a database table. It allows you to change the values of one or more columns in existing rows based on specified conditions.

UPDATE employees SET salary = 55000 WHERE employee\_id = 101;

1. **How do you perform a SQL JOIN operation between two tables?**

Performing a SQL JOIN operation between two tables allows you to combine data from both tables based on a related column. SQL offers different types of JOINs, including INNER JOIN, LEFT JOIN (or LEFT OUTER JOIN), RIGHT JOIN (or RIGHT OUTER JOIN), and FULL OUTER JOIN. Here, I'll explain how to use an INNER JOIN as it's one of the most commonly used JOIN operations.

INNER JOIN

SELECT employees.employee\_id, employees.first\_name, employees.last\_name, departments.department\_name

FROM employees

INNER JOIN departments ON employees.department\_id = departments.department\_id;

**GIT QA**

1. **How do you initialize a new Git repository?**

git init (clone) -> git add ->git commit –m ”msg” -> git status -> git push

Step 1: git init used to initialize a new Git repository in the current directory

Step 2: git add if you have existing files that you want to include in the repository, you can add them using the git add command

Step 3: git commit -m "Initial commit" after adding files, you should commit them to create an initial snapshot of the project. Use the git commit command with a commit message

Step 4: git status used in Git to display the current state of your working directory and staging area (index) in relation to your Git repository. It provides information about which files have been modified, which files are staged for the next commit, and which files are untracked.

Step 5: git push used to pull request to notify others about changes you've pushed to a repository. It's a way to request that someone review and potentially merge your changes into the main or target branch.

1. **What command is used to add changes to the staging area in Git?**

To add changes to the staging area in Git, you can use the git add command. Like git add , git add . , git add \*.js, git add –all

1. **How do you commit changes in Git?**

Before committing, you need to stage the changes you want to include in the commit using the git add command.

Once your changes are staged, you can commit them using the git commit command:

git commit -m "Initial commit"

After running the git commit command, Git will create a new commit with the staged changes. You can view the commit details and the commit message by using git log: git log

**Push Your Commit (Optional)**: If you are working with a remote repository (e.g., on GitHub or GitLab), you may need to push your commits to the remote repository to make them available to others: git push origin branch\_name