ARTICLE ON GIT

Firstly, let us see what is Git ?

Git is a distributed version-control system for tracking changes in source code during software development. It is designed for coordinating work among programmers, but it can be used to track changes in any set of files.

GOALS OF GIT :

- Speed
- Data integrity
- Support for distributed systems
- Non-linear workflows

CHARACTERISTICS :

1. **Strong support for non-linear development**
2. **Distributed development**
3. **Compatibility with existent systems and protocols**
4. **Efficient handling of large projects**
5. **Cryptographic authentication of history**
6. **Pluggable merge strategies**
7. **Garbage accumulates until collected**

DATA STRUCTURES :

Git has two data structures:

- Mutable index (also called stage or cache) that caches information about the working directory and the next revision to be committed.
- Immutable, append-only object database.

Let us discuss some of the Git commands and it's uses!

- git --version : Used to check the versions.
- git checkout master : Checks the latest changer made to the master branch.
- git status : Checks the changes made to the file.
- git add file-name :Adds files to staging.
- git add * :Adds all files to staging.
- git checkout : Deletes all changes except unstaged files.
- git clean –f : Cleans all changes.