

# ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

DAY – 4

26 June 2025

## GITHUB :

Git is the free and open source distributed version control system that's responsible for everything GitHub related that happens locally on your computer.

## Understanding Github Commands

GitHub commands are an essential part of the Git version control system, which is used to track changes in code and collaborate with others. Git operates on a series of commands that allow users to perform actions like creating repositories, managing branches, and merging changes.

### ➔ Check if Git is already installed

Open your terminal and run:

```
git --version
```

### ➔ Install Git on Ubuntu

If Git is not installed, you can install it using:

```
sudo apt update
```

```
sudo apt install git
```

### ➔ After Installation: Set Your Identity

Once installed, configure your Git identity (required for committing code):

```
git config --global user.name "Your Name"
```

```
git config --global user.email "you@example.com"
```

### ➔ Create or Clone a Repository

```
# Initialize a new local repo
```

```
git init
```

# Clone an existing GitHub repo

git clone https://github.com/username/repo.git

### ➔ Basic Workflow

# Check the status of your repo

git status

# Stage files for commit

git add filename      # Add one file

git add .              # Add all changed files

# Commit staged files

git commit -m "Your message here"

### ➔ Push & Pull

# Push commits to GitHub

git push origin main

# Pull latest changes from GitHub

git pull origin main