**Lab :Securing Sensitive Data with Git and GitHub**

**Objective:**

1. Prevent sensitive files from being tracked in Git using .gitignore.
2. Securely store sensitive information using GitHub Secrets.
3. Access GitHub Secrets within GitHub Actions workflows.

**Prerequisites:**

* Git installed on your system.
* A GitHub account.
* Basic knowledge of Git and GitHub.

**Instructions:**

1. **Initialize a New Git Repository: 0.5 mark** 
   * Create a new directory for your project.
   * Initialize it as a Git repository.
   * Create a file named config.js and add a placeholder for an API key.
2. **Prevent Sensitive Files from Being Tracked: 0.5 mark** 
   * Create a .env file to store sensitive information.
   * Add the .env file to .gitignore to ensure it's not tracked by Git.
3. **Push Code to GitHub: 0.5 mark** 
   * Create a new private repository on GitHub named secure-data-lab.
   * Add the GitHub repository as a remote to your local repository.
   * Push your local commits to GitHub.
4. **Set Up GitHub Secrets: 0.5 mark** 
   * In your GitHub repository, navigate to **Settings** > **Secrets and variables** > **Actions**.
   * Add a new secret named API\_KEY with a sample value.
5. **Create a GitHub Actions Workflow: 0.5 Bonus mark** 
   * In your local repository, create a .github/workflows directory.
   * Inside this directory, create a file named deploy.yml.
   * Define a workflow that:
     + Triggers on pushes to the main branch.
     + Checks out the code.
     + Prints the API\_KEY secret to the console.
6. **Test the Workflow: 0.5 Bonus mark**
   * Commit and push the workflow file to GitHub.
   * Verify that the workflow runs successfully and that the secret is accessed correctly.
7. Record maximum 5 minutes video and upload in BB.All members need to talk and show the implementation .Talk clearly .Do not use any coding ,… **1.5 marks**
8. Create a notepad and put all your commands with explanation there **. 1.5 marks**

**Note:**

* Troubleshooting is part of your evaluation. Make sure you work with your team to address each part
* Q5 and 6 are not mandatory.