Project 1 : **Static Website Deployment with Cloud & CI/CD**

We built a tiny website and automated its deployment to the internet using free, industry-standard tools. Here’s the big picture:

1. **Created a Simple Website**: Wrote basic HTML/CSS code for a "Hello DevOps!" webpage.
2. **Hosted It on the Cloud**: Uploaded the website to **AWS S3**, a storage service, making it accessible to anyone via a public link.
3. **Automated Updates**: Set up **GitHub Actions** (a robot helper) to automatically push future changes to the website—no manual work needed!

**What We Achieved**:

* **Automation Magic**: Eliminated manual file uploads—updates happen instantly when we edit the code.
* **Cost-Free Hosting**: Used AWS’s free tier to host the website at $0 cost.
* **Real-World Skills**: Learned tools used by companies worldwide (AWS, CI/CD, Git).
* **Foundation for Growth**: This project is a stepping stone to building complex apps, APIs, or even portfolios.

**Why It Matters**:

* **Problem Solved**: Manual website updates are slow and error-prone. Automation saves time and reduces mistakes.
* **Scalability**: This setup can handle thousands of visitors with minimal effort.
* **Career Relevance**: Demonstrated hands-on DevOps skills (cloud, automation, IaC) in a practical project.