CLOUD

### Create Cloud Provider Accounts- AWS Free Tier account (Preferable)  
 - <https://aws.amazon.com/resources/create-account/>- Azure Free account  
 - <https://azure.microsoft.com/en-us/Free>### Command Line Interface- \*\*Windows Users\*\*: - Windows Terminal: [<https://github.com/microsoft/terminal/releases/](https://github.com/microsoft/terminal/releases/)> - PowerShell: [<https://docs.microsoft.com/en-us/powershell/scripting/install/installing-powershell](https://docs.microsoft.com/en-us/powershell/scripting/install/installing-powershell)> - Installation instructions & verification steps  
- \*\*macOS/Linux Users\*\*: - Terminal comes pre-installed  
 - Optional: iTerm2 for macOS: [<https://iterm2.com/](https://iterm2.com/)> - Installation instructions & verification steps### Cloud CLI Tools#### AWS CLI- Installation link: [<https://aws.amazon.com/cli/](https://aws.amazon.com/cli/)>- Setup instructions: aws configure- Verification: aws --version  
 aws sts get-caller-identity#### Azure CLI  
- Installation link: [<https://docs.microsoft.com/en-us/cli/azure/install-azure-cli](https://docs.microsoft.com/en-us/cli/azure/install-azure-cli)>- Setup instructions:az login- Verification: az --version  
 az account show### Visual Studio Code- Download link: [<https://code.visualstudio.com/](https://code.visualstudio.com/)>- Recommended extensions:  
 - AWS Toolkit  
 - Azure Tools  
 - Google Cloud Tools  
 - Terraform  
 - Docker  
 - Kubernetes  
 - Remote Development  
- Installation instructions & verification steps## To read:  
The Cloud in a Nutshell (AWS) - <https://aws.amazon.com/what-is-cloud-computing/>What Is Cloud Computing? A Beginner’s Guide (Microsoft Azure) - <https://azure.microsoft.com/en-us/resources/cloud-computing-dictionary/what-is-cloud-computing/>What is cloud computing? (IBM) - <https://www.ibm.com/think/topics/cloud-computing#toc-infographic-9z7h9q2m>## Project:  
Create a Simple Static Website on AWS S3- Objective: Host a basic HTML webpage using Amazon S3 (Simple Storage Service) to understand cloud storage and web hosting.- Steps: 1. Sign up for an AWS Free Tier account ([<https://aws.amazon.com/free/](https://aws.amazon.com/free/)>). 2. Follow the AWS tutorial to create an S3 bucket: [<https://docs.aws.amazon.com/AmazonS3/latest/userguide/GetStartedWithS3.html](https://docs.aws.amazon.com/AmazonS3/latest/userguide/GetStartedWithS3.html)>. 3. Create a simple HTML file (e.g., <h1>Hello, Cloud!</h1>) on your computer. 4. Upload the file to your S3 bucket and enable static website hosting in the bucket settings. 5. Access the public URL to view your webpage.- Tools/Resources: - AWS Free Tier (S3 is free for 5GB storage/month). - AWS Documentation: [<https://docs.aws.amazon.com/AmazonS3/latest/userguide/WebsiteHosting.html](https://docs.aws.amazon.com/AmazonS3/latest/userguide/WebsiteHosting.html)>. - Optional: Watch AWS’s 3-minute S3 intro video ([<https://www.youtube.com/watch?v=0R8v-bU6c2c](https://www.youtube.com/watch?v=0R8v-bU6c2c)>).For Learners with some experience,  
- Use Cloudfront to make the website more secure and fast.

Amazon Web Services, Inc.**Amazon Web Services, Inc.**

[**How to Create an AWS Account**](https://aws.amazon.com/resources/create-account/)

Creating an account is the starting point to provide access to AWS services and resources. Follow these steps to set up your account.

F,{3d7220bf-97a5-4d8c-bcfb-d21758eeb363}{51},0.6666667,0.6666667**azure.microsoft.com**

[**Create Your Azure Free Account Today | Microsoft Azure**](https://azure.microsoft.com/en-us/Free)

Get started with 12 months of free services, 40+ services that are always free, and USD200 in credit. Create your free account today with Microsoft Azure.

For Self Hosted:

Set up VirtualBox

<https://www.youtube.com/watch?v=8mns5yqMfZk&ab_channel=ProgrammingKnowledge2>

1. Download Ubuntu server iso
   1. <https://ubuntu.com/download/desktop>
2. Create a VM (2 cpus, 2 gb ram, 10gb disk)
3. Attach ISO and install Ubuntu
4. Practise CLI commands
   1. <https://youtu.be/s3ii48qYBxA?si=HnRq7alI47Os2g2D>
   2. You can install WSL on windows <https://youtu.be/vxTW22y8zV8?si=uBHl4AS_Xr7pxPvv>
5. Watch this to understand the differences of cloud (Self hosted vs AWS) <https://youtu.be/s3ii48qYBxA?si=HnRq7alI47Os2g2D> <https://youtu.be/YyrrRbKRT90?si=JQOYXyehEm7GIdLX>

YouTube[**YouTube**](https://www.youtube.com/) | [ProgrammingKnowledge2](https://www.youtube.com/@ProgrammingKnowledge2)

[**How to Install VirtualBox on Windows 10**](https://www.youtube.com/watch?v=8mns5yqMfZk&amp;ab_channel=ProgrammingKnowledge2)

**Ubuntu**

[**Download Ubuntu Desktop | Ubuntu**](https://ubuntu.com/download/desktop)

Ubuntu is an open source software operating system that runs from the desktop, to the cloud, to all your internet connected things.