

Introduction to AWS Services

- Timeline
- Regions
- AZ
- EndPoint
- ARN
- Server & Serverless
- Services categorization
- Free tier account & other account types

Amazon VPC

- VPC (Public & Private)
- Subnets (Public & Private)
- Private & Public IP
- Security Groups & ACL

IAM

- Users
- Roles (Different Roles)
- Policies
- Security keys, Profiles & Setup

IAM Lab

Amazon EC2

- Instances
- AMI's
- Instance types (general categorization)
- EBS
- Snapshots
- EC2 Service Limits
- Best Practises + Pricing
- Security Concepts recap
- Private IP
- Public IP / Elastic IP
- Launching EC2 Machine
- Connecting to EC2
- Profiles setup + Pricing

Amazon S3

- Introduction
- Serverless
- Bucket Operations
- Bucket Security config & other configs
- Metadata, Storage Class, Versioning, LifeCycle Management & Cors Config.
- Object Operations (upload via. CLI & Python boto3 API)
- Limitations
- S3 and its integration with other services (Athena + Lambda + SQS)
- S3 commands example

Amazon Redshift

Sheet1

- Introduction, High level Architecture & Pricing
- Creating a Redshift Cluster & Connecting to Database
- DDL, DML, DCL Operations
- Table design techniques
- Loading data + ELT (Difference between etl and elt)
- Managing Cluster
- Redshift Spectrum
- Redshift + Python + UDF's
- Datawarehousing Techniques using Redshift & Key Challenges

Snowflake

- What is ?
 - Features, Logical & Physical Architecture, Editions, Connectivity, Pricing & Tradeoffs
- Further Concepts
 - Difference between Redshift & Snowflake, Warehouses + Pricing, Creating tables, Loading data
- How data is stored
 - Storage, Clustering & Views
- Data Pipelines & Tasks (ELT)
 - SnowSQL, Staging, SnowPipe & Tasks

Sheet1

1 Hour	theory
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1 Hour	theory
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1 Hour	theory
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1 Hour	Lab
1 Hour	Theory + lab

2 Hour	theory + lab
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2 Hour	theory + lab
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3 Hour	Theory + lab
1 Hour	Lab

5 Hours	Theory + lab
1 Hour	Theory + lab

5 Hours	Theory + lab
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