**Top N projects for Beginners**

1. **Title**: File Upload Notification System

**Description**:

Create a system that monitors an S3 bucket for new file uploads, triggers a Lambda function to process the uploaded files, sends a notification using SNS, and stores metadata in an SQS queue for further processing.

* 1. S3 Event Trigger
  2. Lambda
  3. SQS
  4. SNS
  5. Integration of S3 with other services

1. **Title**: Serverless Data Analysis Platform

**Project Description**: Create a serverless data analysis platform that allows Lambda functions to access and process data from both a public RDS database and a private RDS database. The platform should store results in s3 bucket.

* 1. RDS
  2. Lambda
  3. S3
  4. VPC and subnets

1. **Title**: Sales Analytics Dashboard for Global Energy Industry

**Project Description**: Develop a comprehensive Dashboard in Amazon QuickSight to gain insights into sales by multiple attributes.

* 1. QuickSight

1. **Title**: Data Ingestion and Extraction Pipeline for Redshift

**Project Description**: Build a comprehensive data pipeline that facilitates the loading of data from Amazon S3 into Amazon Redshift, supports both compressed and uncompressed files, unloads encrypted data files from Redshift back to S3, and offers the flexibility to unload data in delimited or fixed-width formats as required.

1. S3
2. Redshift
3. **Title**: Conditional Workflow State Machine

**Project Description**: Create an AWS Step Functions state machine that performs the addition of two numbers and then executes different branches of the workflow based on whether the result is even or odd. This project helps you understand how to build conditional workflows using AWS Step Functions.

1. Step Function
2. Lambda
3. **Title**: Real-time IoT Data Ingestion and Analysis with AWS Kinesis and IoT Core

**Project Description**: Create a comprehensive project that demonstrates the end-to-end process of ingesting real-time IoT data using AWS Kinesis and AWS IoT Core. This project involves setting up IoT devices, streaming data to AWS and saving data to s3

1. IOT Core
2. Kinesis Firehose
3. S3
4. Lmabda
5. **Title**: Seamless On-Premises to AWS RDS Database Migration with AWS DMS

**Project Description**: The primary objective of this project is to execute a streamlined and secure migration of an on-premises database to an Amazon Web Services (AWS) Relational Database Service (RDS) instance utilizing the AWS Database Migration Service (DMS). This migration will ensure improved data management, scalability, and availability while maintaining data integrity and minimizing business disruptions.

1. RDS
2. DMS
3. EC2
4. SSMS