**AWS Cloud Infrastructure Setup**

**1. Create an IAM Role**

* Go to the **IAM Console**.
* Click on **Roles** > **Create role**.
* Select **AWS service** and then choose **EC2**.
* Click **Next: Permissions**.
* Attach the following policies to allow access to S3 and RDS:
  + AmazonS3FullAccess
  + AmazonRDSFullAccess
* Click **Next: Tags**, then **Next: Review**.
* Name the role (e.g., EC2-Docker-Role) and click **Create role**.

**2. Set Up an EC2 Instance**

* Go to the **EC2 Console**.
* Click **Launch Instance**.
* Choose an **Amazon Machine Image (AMI)**
* Select an **Instance Type**
* In the **Configure Instance** section:
  + Select the **IAM role** you created earlier.
* In the **Configure Security Group**:
  + Allow HTTP (port 80) and SSH (port 22) access.
* Review and launch the instance.

**3. Install Docker on the EC2 Instance**

* Connect to your EC2 instance using SSH.
* Run the following commands to install Docker:

sudo yum update -y # For Amazon Linux

sudo yum install docker -y

sudo service docker start

**Set Up an RDS Instance**

* Go to the RDS Console.
* Click on Create database.
* Choose Standard Create.
* Select MySQL as the database engine.
* Configure the settings:
  + DB instance class: db.t2.micro (for testing)
  + Storage type: General Purpose (SSD)
  + DB instance identifier: (e.g., mywordpressdb)
  + Master username and password.
  + Click Create database.
* Wait for the RDS instance to be available.

**5. Create an S3 Bucket**

* Go to the S3 Console.
* Click on Create bucket.
* Configure the bucket settings:
  + Bucket name: (e.g., my-wordpress-uploads)
  + Region: Choose the same region as your EC2 and RDS.
  + Configure options as needed (e.g., versioning, logging).
* Click **Create bucket**.

**Configure WordPress for Docker**

* Create a Docker Compose file (docker-compose.yml) for WordPress:

**Run Docker Compose**

* On your EC2 instance, navigate to the directory where your docker-compose.yml file is located and run: