**Week 3: AWS DevOps Tools**

**Objective**: Focus on DevOps-specific AWS tools and practices.

**Day 11: Monitoring & Logging (CloudWatch, CloudTrail)**

* **Theory**:
  + CloudWatch: Metrics, Logs, Dashboards.
  + CloudTrail: Audit logs.
* **Hands-On**:
  + Set up a CloudWatch dashboard.
  + Analyze CloudTrail logs.
* **Interview Prep**:
  + Monitoring-related interview questions.

**Day 12: Auto Scaling & Load Balancing**

* **Theory**:
  + Auto Scaling: Scaling policies, Launch Configurations.
  + Load Balancers: ALB, NLB.
* **Hands-On**:
  + Set up an Auto Scaling group with an ALB.
* **Interview Prep**:
  + Auto Scaling interview questions (e.g., scaling policies).

**Day 13: Security & Compliance (IAM, KMS, Secrets Manager)**

* **Theory**:
  + IAM: Advanced policies.
  + KMS: Key management.
  + Secrets Manager: Secure storage of credentials.
* **Hands-On**:
  + Rotate database credentials using Secrets Manager.
* **Interview Prep**:
  + Security-related interview questions.

**Day 14: Advanced CI/CD (CodeDeploy, CodeStar)**

* **Theory**:
  + CodeDeploy: Deployment strategies.
  + CodeStar: Project management.
* **Hands-On**:
  + Deploy an application using CodeDeploy.
* **Interview Prep**:
  + Deployment strategies (e.g., blue/green, canary).

**Day 15: DevOps Best Practices**

* **Theory**:
  + Infrastructure as Code (IaC).
  + Continuous Monitoring.
  + Disaster Recovery.
* **Hands-On**:
  + Review and optimize a sample DevOps pipeline.
* **Interview Prep**:
  + DevOps best practices interview questions.

**Week 4: Hands-On Projects**

**Objective**: Apply knowledge to real-world projects.

**Day 16-20: Project Work**

* **Project 1**: Build a CI/CD pipeline for a web application.
* **Project 2**: Set up a highly available architecture using Auto Scaling, ALB, and RDS.
* **Project 3**: Implement a serverless application using Lambda, API Gateway, and DynamoDB.
* **Project 4**: Create a monitoring and alerting system using CloudWatch.
* **Project 5**: Present projects and receive feedback.