

# LKS Cloud Computing Provinsi Jawa Barat 2022 - Tryout 1

July 20, 2022

## Task 1

1. Create a Hosted Zone in Route53 and update your domain's NS records to use Route 53 name servers.  
Reference: [Route 53 Documentation](#)
2. Ensure your domain has been configured correctly in Route 53 (e.g., Create an A record and check the result with ping/dig/nslookup).

## Task 2

Follow the following tutorial to create CRUD API with Lambda and DynamoDB: [CRUD Tutorial](#)

## Task 3

1. Create a bucket and enable static website hosting. The bucket name must contain: "LKSCC2022-[Your LKS ID]"  
Reference: [S3 Documentation](#)
2. Create a file named index.html, the body must contain your LKS ID.  
Reference: [HTML Basic Example](#)
3. Upload index.html to the bucket.
4. Ensure that you can open the file via the static website hosting URL.
5. Create CloudFront distribution with static website hosting URL as the origin.  
Reference: [CloudFront documentation](#)
6. Ensure your CloudFront distribution content matches the S3 bucket content.

## Task 4

1. Create a VPC with 2 availability zones (AZs), each AZ must have a public subnet and a private subnet (NAT).  
Reference: [VPC documentation](#)
2. Create Elastic Load Balancer with the following specification:
  - Type: Application Load Balancer
  - Security Group: Allow HTTP and HTTPS from anywhereReference: [Elastic Load Balancer documentation](#)
3. Create an EC2 instance, install nginx.  
Reference: [EC2 Documentation](#)

4. Create an AMI for Autoscaling Group using the EC2 instance you have created previously.  
Reference: [Create an AMI from EC2 Instance](#)
5. Create an Autoscaling Group with the following specifications:
  - Subnet: Private
  - Instance Type: t2.micro
  - Desired Capacity: 2
  - Minimum Capacity: 2
  - Maximum Capacity: 2
6. Forward Application Load Balancer's incoming traffic to Autoscaling Group
7. Ensure you can see the default NGINX's page from the internet by opening Application Load Balancer's URL.
8. (Optional) Ensure you can create RDS MySQL instance.  
Reference: [RDS Documentation](#)
9. (Optional) Ensure you can create ElastiCache Redis cluster.  
Reference: [ElastiCache Documentation](#)