



DEVOPS ENGINEER



**SCENARIO-BASED
INTERVIEW
QUESTIONS**



www.prominentacademy.in



Question :

Write a Bash script to check the expiry date of an SSL certificate for a given domain.

Logic:

Tests networking, security awareness, and Bash scripting skills.

bash

```
#!/bin/bash
domain="example.com"
expiry_date=$(echo | openssl s_client -connect $domain:443 -
servername $domain 2>/dev/null \
| openssl x509 -noout -enddate | cut -d= -f2)
echo "SSL Certificate for $domain expires on: $expiry_date"
```

Common Mistakes:

- Not handling cases where the domain is down or the SSL handshake fails.
- Hardcoding the domain without user input options.

Question :

Write a Python script to generate a dynamic inventory for Ansible from AWS EC2 instances:

Logic:

Tests automation, Python scripting, and infrastructure management.

bash

```
import boto3
import json

ec2 = boto3.client('ec2')
response = ec2.describe_instances()

inventory = {"all": {"hosts": []}}

for reservation in response['Reservations']:
    for instance in reservation['Instances']:
        if instance['State']['Name'] == 'running':
            inventory["all"]
            ["hosts"].append(instance['PrivateIpAddress'])

print(json.dumps(inventory, indent=4))
```

Common Mistakes:

- Missing filters to include only relevant instances (e.g., by tag or environment).
- No error handling for API rate limits or permission issues.

Question :

Write a Python script to fetch the build status of the latest Jenkins job using the Jenkins REST API.

Logic:

Tests CI/CD integration, REST API handling, and automation.

bash

```
import requests
from requests.auth import HTTPBasicAuth

jenkins_url = 'http://jenkins.example.com/job/my-
job/lastBuild/api/json'
username = 'admin'
api_token = 'your_api_token'

response = requests.get(jenkins_url, auth=HTTPBasicAuth(username,
api_token))
data = response.json()

print(f"Job Status: {data['result']}")
```

Common Mistakes:

- Hardcoding credentials instead of using environment variables.
- No error handling for connection failures.

Question :

Write a Bash script to automatically restart pods that exceed CPU usage of 80% in a Kubernetes cluster.

Logic:

Tests Kubernetes monitoring, resource management, and automation.

bash

```
#!/bin/bash
namespace="default"
cpu_threshold=80

kubectl top pods -n $namespace --no-headers | while read pod cpu
mem; do
    cpu_usage=${cpu%?}
    if [ "$cpu_usage" -gt "$cpu_threshold" ]; then
        echo "Restarting pod: $pod (CPU: $cpu)"
        kubectl delete pod $pod -n $namespace
    fi
done
```

Common Mistakes:

- No check for critical system pods to avoid accidental disruptions.
- Not waiting for pods to be fully terminated before redeployment.

Question :

Write a Jenkins declarative pipeline for a Blue-Green deployment strategy.

Logic:

Tests CI/CD pipelines, deployment strategies, and automation.

groovy

```
pipeline {
  agent any
  stages {
    stage('Build') {
      steps {
        sh 'docker build -t myapp:latest .'
      }
    }
    stage('Deploy to Green') {
      steps {
        sh 'kubectl apply -f green-deployment.yaml'
      }
    }
    stage('Switch Traffic') {
      steps {
        sh 'kubectl apply -f switch-to-green.yaml'
      }
    }
  }
}
```

Common Mistakes:

- Not validating the Green environment before switching traffic.
- Missing rollback strategy in case of failure.

Question :

Write a Terraform module to create an S3 bucket with versioning enabled and apply proper access controls.

Logic:

Tests Infrastructure as Code (IaC), resource management, and security practices.

```
hcl

variable "bucket_name" {}



resource "aws_s3_bucket" "versioned_bucket" {
  bucket = var.bucket_name
  versioning {
    enabled = true
  }
  acl = "private"
  tags = {
    Environment = "DevOps"
  }
}

output "bucket_arn" {
  value = aws_s3_bucket.versioned_bucket.arn
}
```

Common Mistakes:


- Not enabling server-side encryption for security compliance.
- Missing lifecycle policies for managing object versions.

Think your skills are enough? Think again—these Devops questions could cost you your Devops job.

Looking to crack your devops interviews and land your dream job?  We've got you covered! At Prominent Academy, we specialize in providing end-to-end interview preparation that ensures you're not just ready—but confident! 

What We Cover:

- ✓ Mock Interviews tailored to devops roles
- ✓ Real-world scenario-based questions
- ✓ Guidance on resume building and LinkedIn optimization
- ✓ In-depth coverage of devops core concepts, and projects
- ✓ Unlimited interview calls with top companies

 Whether you're a fresher or an experienced professional transitioning to devops, we provide personalized guidance to help you shine in interviews and stand out in the competitive market

 call us at **+91 98604 38743** to learn more.