# STUDENT



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## Class Schedule

- ► Agile, SDLC, Scrum, Jira
- Python
- ► Linux
- AWS
- ► Git
- DevOps
- Networking
- ► SQL

# **Teamwork Schedule**

#### **Questions**

#### 20 minutes

- 1. Within the CloudFormation, updates can sometimes replace resources.
  - A. True
  - B. False
- 2. Which of the following is NOT an option while running a new CloudFormation template?
- A. Tags
- B. Permissions
- C. Notification Options
- D. Timeouts
- E. Rollback on Failure
- F. Stack Policy
- G. Custom Script
- 3. What tool should I use for automating the deployment of CloudFormation templates?
- A. Cloud Formation Designer
- B. AWS CLI
- C. Shell Script
- D. S3 service

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A consulting firm repeatedly builds large architectures for their customers using AWS resources from several AWS services including IAM, Amazon EC2, Amazon RDS, DynamoDB and Amazon VPC. The consultants have architecture diagrams for each of their architectures, and are frustrated that they cannot use them to automatically create their resources.

Which service should provide immediate benefits to the organization?

- A. AWS Beanstalk
- B. AWS CloudFormation
- C. AWS CodeBuild
- D. AWS CodeDeploy

You have a requirement to host a static website following the best practices for a domain named <u>mycompany.com</u> in AWS.

How would you set up this? (SELECT TWO)

- A. Host the static site on an EC2 Instance.
- B. Use Route53 with a static web site in S3.
- C. Enter the DNS records from Route53 in the hosted zones..
- D. Place the EC2 instance behind the ELB.

A company hosts 5 web servers in AWS. They want to ensure that Route53 can be used to route user traffic to random healthy web servers when they request for the underlying web application. Which routing policy should be used to fulfill this requirement?

- A. Simple
- B. Weighted
- C. Multivalue Answer
- D. Latency

Which of the following statements are FALSE when it comes to elasticity. Choose 2 answers from the options given below.

- A. Diverting traffic to instances based on the demand
- B. Diverting traffic to instances with the least load
- C. Diverting traffic across multiple regions
- D. Diverting traffic to instances with higher capacity

A company has set up some EC2 Instances in a VPC with the default Security group and NACL settings. They want to ensure that IT admin staff can connect to the EC2 Instance via SSH from specific IP addresses. As an architect, what would you ask the IT admin team to do to ensure that they can connect to the EC2 Instance from the Internet. Choose 2 answers from the options below

- A. Ensure that the Instance has a Public or Elastic IP
- B. Ensure that the Instance has a Private IP
- C. Ensure to modify the Security groups
- D. Ensure to modify the NACL rules

Video of the Week

15 mins

**Lambda Expressions & Anonymous Functions** 

https://www.youtube.com/watch?v=25ovCm9jKfA

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Students should work in small teams to complete the problem of the week.

| salesmen | waitress | referee   | attendant | rabbi   | ballerina |
|----------|----------|-----------|-----------|---------|-----------|
| ghost    | abhor    | forty     | almost    | biopsy  | spoon     |
| twisted  | wrote    | bookend   | clasping  | baker   | chair     |
| chains   | because  | blackbird | sainted   | taxman  | misery    |
| behind   | sprint   | blotch    | plenty    | cranky  | froths    |
| adviser  | flushed  | replicas  | voyager   | rations | matured   |

Answer:

Also indicate which computational thinking concepts have you used and how you used them.

#### **Presentation of Coding Challenge & POW**

20 mins

We assume that each group has two sub teams. If this is possible one of the sub teams will present the coding challenge of last week. The other sub team will present the solution to the previous problem of the week. If there is only one sub team then, the sub team will present both of the solutions.

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### **Coding Challenge**

5 mins

Write a python code that finds the largest number among the 5 numbers given as an input. It is forbidden to use max() function. Indicate which computational thinking concepts you have used.

### **Case study**

10 mins

Case study should be explained to the students during the weekly meeting and has to be completed in one sprint (2 weeks) by the students. Students should work in small teams to complete the case study.

<u>Project 001: Roman Numerals Converter Application (Python Flask)</u> <u>deployed on AWS EC2 with Cloudformation</u>

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