Which of the following is not true of creating a custom Docker image from a container?



The container has to be halted



None of these



The custom image will contain all modifications made to the container.



The image will update the downloaded **layers**

What happens to the layers downloaded with an image when the image is deleted?



None of these



Cached for future use



Deleted along with the **image**



Shared with the other images

Let us assume that you want to create an ECS cluster to deploy an application. Which of the following attributes is sufficient to help the cluster find the Docker image to be deployed?



ARN



URI



**Repository name**



None of these

Which of the following is the correct hierarchy of ECS objects? Assume that < denotes “lives inside”.



Task<Container<Service<Cluster



Service<Container<Task<Cluster



Container<Service<Task<Cluster



Container<Task<Service<Cluster

The folder which is scanned by Tomcat for applications is called



None of these



**webapps**



war



http

What is the output of the get-login command?



Uses the PEM file for login to ECR



Returns your AWS credentials



Directly connects Docker to ECR



**Outputs the username and encrypted** password needed for Docker to connect to ECR

Which of the following components of provisioning time is greatly reduced or eliminated when containers are used as opposed to virtual machines?



**Infrastructure**



None of these



Library linking



Application boot up

Consider the following set of commands that you executed in a terminal window

*docker run busybox /bin/echo “Testing docker”*

#The following line just retrieves the image id of the centos image  
*imageid=$(docker images|grep busybox|awk '{print $3}')*  
  
*docker rmi $imageid*

What is the expected outcome?



A container is created but the image fails to delete



A container fails to create



**A container is created and the busybox image is removed**



None of these

What is the maximum amount of RAM a container can consume if it is not memory limited?



2GB



10MB



None of these



As much as the host instance has free

Which of the following is a reason to prefer horizontal scaling over vertical scaling when deploying containers in a cluster?



A VM cannot support concurrent tasks



**Loss of a VM would lead to the loss of fewer tasks and containers**



It is easier to create a new container in a fresh VM



None of these

A container process is a child process of the



**Container manager**



None of the above



Docker CLI client



Docker daemon

Which docker command is used to unzip a portable Docker tar and deploy it on another machine?



load



gunzip



unzip



tar -xvf

How long does a container stay in the running state if it is not manually halted?



Has a set timeout after which it pauses



**As long as the container’s PID 1 is running**



None of these



Until its container is deleted

The function of Kubernetes is to act as a



Repository



**Orchestration Service**



None of these



Deployment environment

Which of the following flags is used to restrict the memory utilization of a container?



--m



-m



-mem



--mem

Which of the following is the default tag of an image downloaded from a Dockerhub repository?



1.0



**latest**



Null



new

Which of the following is required while executing the docker tag command?



Image name, URI



Image name, account ID



None of these



Login details, image name

Which of the following has the responsibility of communicating user commands to the Docker daemon?



**Docker CLI client**



None of these



Bash shell



Kubernetes

Consider an application is binding to port 3000 in a container, however, the host virtual machine has a firewall rule to allow bidirectional traffic on 80. How can the container serve this traffic?



Reroute traffic using NAT



Use --portmap flag



Not the right usecase for containers



Using the flag -p

The life cycle of a container, at the maximum, is bounded by



None of these



The image it is based on



The hosting environment



**The processes running inside it**

What is the expected outcome if you run the following command twice in a row?  
docker run -d -p 8080:8080 tomcat:jre8



Port allocation error



2 containers from the image will be created and immediately terminated



None of these



2 containers from the image tomcat:jre8 will be created

Which of the following ports is used by a container load balancer as a listener port by default?



**80**



443



8081



8080

Which of the following flags would you use to interact with a container running in detached mode?



-it



--rm



-d



-f

Two Applications need to run a Linux based OS of size 1.5GB and a deployment environment of 0.5GB with the applications and their libraries themselves having sizes of 0.4GB and 0.6GB respectively. Calculate the disk space savings in deploying the applications in containers as opposed to deploying them in virtual machines.



0GB



0.5GB



**2GB**



1.5GB

Which of the following commands is used to download an image from a repository without directly creating a container from it?



**Wget**



Pull



curl



Get

Which of the following gets first preference when the docker daemon searches for an image?



DockerHub



**Local Disk**



None of these



Private repository

Creating a custom image out of a modified container can be analogously compared to



Compiling a program to get the executable file



Zipping a web application to create a war file



**Committing a change in a Git repository**



None of these

Which of the following best illustrates the relationship between an image and a container?



None of these



Parent and child process



**Executable and process**



Executable and its hard link

The docker command used to log into a shell in a running container is



run



start



**exec**



None of these

Consider an application consisting of the following containerized services communicating with each other: account management,order fulfilment, order tracking and payments. What is the number of recommended tasks/pods to handle these services?



1



None of these



**4**



2

Which of the following services are invoked during the creation of an ECS cluster?



None of these



Lambda, Elastic Beanstalk, RDS

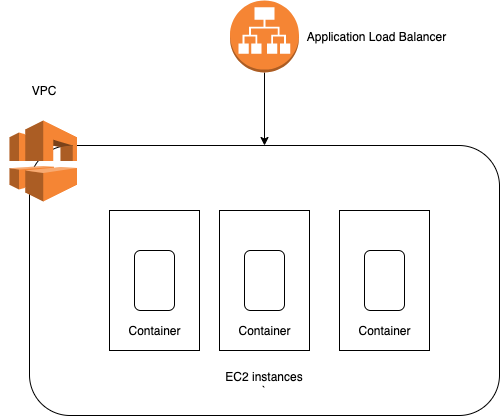


Lambda, Subnet, S3



**CloudWatch, VPC, Subnet**

Consider the given architecture which is the production environment for a small startup.



The containers were created from a proprietary image used by the developer. When one of the open-source libraries used in the application was deprecated, he pushed an update to both components of his application- the backend component hosted on containers by manually updating them and the front-end component which is in the form of a native application installed on his customers’ desktops. This update migrated the application from the deprecated library to a new one.  
Later that day, there was a massive spike in traffic and an AutoScaling group worked with Kubernetes to provision 3 more instances with containers to handle the traffic with startup scripts deploying the application from an online repository. Soon, there were numerous complaints about consumers not being able to access the application.  
Which of the following errors did the developer commit?



Did not check if the deployed containers could support Apache.



**The original docker image was still using the old APIs which broke compatibility with the front end.**



None of these



Used Kubernetes to create the container instead to manually creating them based on traffic

What is the default permission level of an AWS ECR Repository?



Read-Only by all console IAM users



Global Read-Only



**Read/Write by the IAM user who created it**



Read/Write by all AWS CLI users

An application consists of a set of containers, each hosted on individual EC2 instances.Each container performs a different job, but all of them continuously write their application log data onto a single shared log file.

Which of the following would be the best way to store that log file?



Volume mapping onto an EBS disk



Storing the log file in an S3 bucket



None of these



**Volume mapping onto an EFS disk.**