1)Match the following terms about the building blocks of Lambda based applications
to their respective definitions.
--Lambda function
    The foundation, it is comprised of your custom code and any dependent
    libraries

Event source
    An AWS service, such as Amazon SNS, or a custom service, that triggers
    your function and executes its logic

Downstream resources
    An AWS service, such as DynamoDB tables or Amazon S3 buckets, that your
    Lambda function calls once it is triggered

Log streams
    Annotate your function code with custom logging statements that allow you to
analyze the execution flow and performance of your Lambda function to ensure it's
working properly\

2)As described by our course, which of the following are lifecycles of developing a
Lambda function
--Uploading code and creating Lambda functions
  Authoring code for your Lambda function
  Monitoring and troubleshooting

3)When using AWS Lambda, are you responsible for the underlying infrastructure that
is running your code?
--False

4)Can a lambda function linearly scale with the amount of requests given to it, if
you allow it to do so?
--true

5)As outlined in the our course, which of the following languages are not supported
by AWS Lambda
--Ruby

6)Of the following, which is NOT an instance wherein you would have to restore from
backup?
--Testing changes is too time consuming

7)In MongoDB, databases are called collections.
--True

8)MySQL is an open-source _____ database management system.
--relational

9)_____ is an in-memory key value database store.
--redis

10)You should keep backups for at least _____
--90 days

11)PostgreSQL is known for lacking features and being unreliable under high use
situations?
--False

12)Which of the following is NOT a Cloud Database Service?
--Microsoft Pro

13)A database _____ is the underlying software component that a DBMS uses to create, read, update and delete data from a database.
--engine

14)Every database should have multiple users act as an administrator to manage them better.
--False

15)Which of these is NOT a privledge level that can be given to MySQL users:
--Root Query

16)According to our course, please match the 12 factors to a 12 Factor App with their descriptions
--Codebase
	There should be exactly one codebase for a deployed service with the codebase being used for many deployments.

Dependencies
	All dependencies should be declared, with no implicit reliance on system tools or libraries

Config
	Configuration that varies between deployments should be stored in the environment.

Backing services
	All backing services are treated as attached resources and attached and detached by the execution environment.

Build, release, run
	The delivery pipeline should strictly consist of build, release, run.

Processes
	Applications should be deployed as one or more stateless processes with persisted data stored on a backing service.

Port binding
	Self-contained services should make themselves available to other services by specified ports.

Concurrency
	Concurrency is advocated by scaling individual processes.

Disposability
	Fast startup and shutdown are advocated for a more robust and resilient system.

Dev/Prod parity
	All environments should be as similar as possible.

Logs
	Applications should produce logs as event streams and leave the execution environment to aggregate.

Processes
	Any needed admin tasks should be kept in source control and packaged with the application.

17)According to our course, what are some potential issues with failing to meet
your SLA?
-- Loss of Clients / Work
   Liabilities For Damage
   Cash Penalties

18)According to our course, can 2 buckets share the same name in a region?
--False

19)According to our course, S3 stands for _____.
--Simple Storage Service

20)According to our course, an SLA is a contract between you and your _____.
--customers

21)According to our class, match the following zone file record types to their
given definition
--@ Record
      The Root record for your domain.

MX Record
       Where the mail server is hosted for your domain

A Record
      Returns a 32-bit IPv4 address, most commonly used to map hostnames to an IP
address of that host

AAAA Record
      Returns a 128-bit IPv6 address, most commonly used to map hostnames to an IP
address of that host

22)According to our class, which of the following are a PRIVATE network address?
--172.16.32.54
   192.168.0.6
   10.255.248.52

23)According to our class, was IPv5 ever completed and implemented worldwide?
--False

24)What does the acronym SAN stand for in the context of Cloud Computing?
--Storage Area Network

25)Why would a Cloud Provider company opt to mainly go with Virutalization over
strictly renting out entire servers?
--Allows coordination and managment of all virutal servers on the network
   Allows for the seemless creation of virtual servers via an API endpoint
   Allows coordination and managment of all virutal servers on the network
   Allows a single server to share it's resources with mutliple virtual server

26)What does the acronym TCO stand for in the context of this course?
--Total Cost of Ownership

27)What was one of the main contributing factors to the Y2K Bug
--Programmers saved memory by only using 2 digits to encode dates

28)What were the main contributing factors to the Dot-Com Bubble Burst?
--Barron's featured a cover article titled "Burning Up; Warning: Internet
companies are running out of cash—fast"
   Micrsoft being ruled guility of Monopolization

The Y2K Bug
   pets.com closing

29)According to this course, as of 2022 which services does Microsoft Azure
currently offer?
--IaaS
   PaaS
   SaaS

30)According to this course, which of the follow are types of clouds?
--Private Cloud
   Public Cloud
   Hybrid Cloud

31)As defined by our lecture, what does the acronym CRAC stand for?
--Computer Room Air Conditioner

32)According to this course, as of 2022 which services does DigitalOcean currently
offer?
--Laas

33)According to this course, as of 2022 which services does Google Cloud Platform
currently offer?
--SaaS
   IaaS
   PaaS

34)As defined by our course, the acronym RISC stands for _____.
-- Reduced Instruction Set Computer

35)As defined by our course, what is a Type 2 Hypervisor?
--A Hypervisor that installs inside a Host Operating System

36)As defined by our course, a _____ is another guest operating system that's
consuming too many system resources on a shared host Hypervisor.
--noisy neighbour

37)As defined by our course, match the following:
--Input/Output Operations Per Second   IOPS
   Hard Disk Drive   HDD
   Solid State Drive SSD
   Elastic Block Storage   EBS

38)As defined by our course, the acronym CISC stands for _____.
--Complex Instruction Set Computer

39)As defined by our course, what is a Emulator Hypervisor?
--A Hypervisor that only supports a specific set of hardware

40)As defined by our course, FLOSS Stands for _____ (including the slash).
--Free/Libre Open Source Software

41)As defined by our course, the acronym VM stands for _____.
--Virtual machine

42)As defined by our course, what is a Type 1 Hypervisor?
--A Hypervisor that installs onto Bare Metal

43)As defined by our course, a _____ is a virtual machine that is kept in lock

step in another availablity zone.
--hot spare

44)If the object a symbolic link is pointed to is moved, the symbolic link will break.
--True

45)Which variable file should you check first if something goes wrong in Linux?
--/var/log

46)Where would we use VIM most often?
--When editing files remotely on a server.

47)Which file system is used for server farms?
--Global File System (GFS)

48)Which of these is NOT a package manager?
--BSB

49)This cell type has a write capacity of 10,000 Planar and 35,000 3D NAND
--MLC

50)Which of the following is NOT one of the three Linux kernels?
--Megalithic

51)A _____ file system keeps track of changes in a journal before committing them to the main filesystem.
--journaled

52)A _____ is a collection of software tools that automate the process of installing, upgrading, configuring and removing computer programs.
--package manager

53)The _____ keeps track of read and write requests from the individual file system implementations and the physical devices.
--buffer cache

54)According to our class, this special character _____ is used to catch the previously ran commands Exit Code
--$?

55)According to our class, which permission bit is required to be set for a script to be able to run?
--Execute Bit

56)According to our class, what command changes the ownership of a file?
--chown

57)According to our class, _____ is a called a shebang and resides at the top of a BASH script.
--#!/bin/bash

58)According to our class, which of the following are groups of permissions on a file?
--User Permissions
  Other Permissions
  Group Permissions

59)According to our class, match the following commands with what their function is

```
--ls      list all contents of the folder in alphabetical order
  man <COMMAND>      Will display the manually for the command that is being
supplied as an argument
  less    Allows paging through text one screen at a time
  cp <file> <file_destination>    Copies a file from source to target
```

60)According to our class, what does BASH stand for?
--Bourne-Again-Shell

61)According to our class, match the following symbols with their names
-- !   Bang
   ~   Tilde
   | Pipe
   -    Tack

62)According to our class, match the following permission short hands to their
meaning
-- r   read permission
   w   write permission
   x   execute permission
   -      no permission

63)According to our class, which are the following are standard streams?
--Standard Input (stdin)
  Standard Error (stderr)
  Standard Output (stdout)