1.	What does BASH stand for? □ Born Again Shell □ Basic Shell □ Bourne Again Shell □ None of the above
2.	Which of the following is the best option for displaying your current environment variables? □ env cat >env.txt □ env more □ export \$ENV cat □ echo env

3. Match the commands with the correct actions.



(Creates a directory – mkdir

Removes a file or directory, or both: rm

Exports variables: export

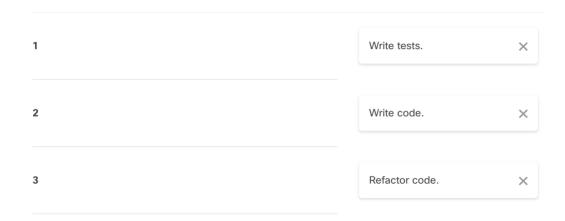
Prints the working directory: pwd

Creates a file: touch)

- **4.** Which command is used to switch to a code branch from a remote repository in Git?
 - git branch
 - git checkout

- git config
- git remote
- **5.** What does the **git add** command do?
 - It adds files to the staging area.
 - It adds files to a remote repository.
 - It tracks files and adds them to the staging area.
 - It tracks files.
- **6.** A senior developer who is working on the same branch as you has just added a fix for a critical bug to a shared Git repository. Which command should you use to update your working directory and test their code with yours?
 - git clone
 - git fetch
 - git pull
 - git reset
- **7.** Where can you find code samples?
 - on the Cisco XE device
 - DevNet Sandbox
 - on the Cisco NX-OS device
 - DevNet GitHub community
- **8.** Which software development methodology is an implementation of the Lean concept in software engineering?
 - Extreme Programming
 - Agile
 - Prototyping
 - Waterfall
- **9.** If you develop with the TDD, what is the first step you will take when implementing a new feature?
 - · Run all tests.
 - Write app code.
 - Write a test.
 - Refactor code.
- **10.** In which relation is a product backlog to a sprint backlog?
 - Work items are typically moved from sprint backlog to product backlog at the sprint start.

- Work items are typically moved from product backlog to sprint backlog at the sprint start.
- Product backlog and sprint backlog refer to the same thing.
- Product backlog and sprint backlog have nothing in common; they are used in different development methodologies.
- **11.** Why is the Refactor step required in test-driven development?
- to make tests pass
- to make tests fail at first
- to improve code quality
- to implement desired functionality
- **12.** Match the steps in the order that they are performed during test-driven development.



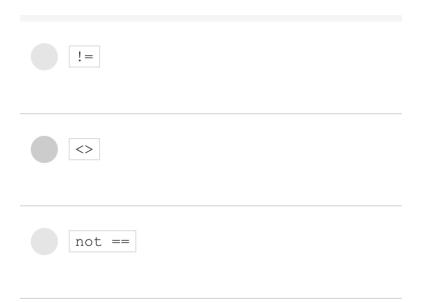
- **13.** When should code review be performed?
 - o in every software development project
 - o only in large projects
 - o only where more than three developers work on the same project
 - o only when critical functionality of the software was modified

14. What is the output of the following piece of code?

print("a", "b", "c", sep="sep")	
asepbsepcsep	
abc	
a b c	
asepbsepc	



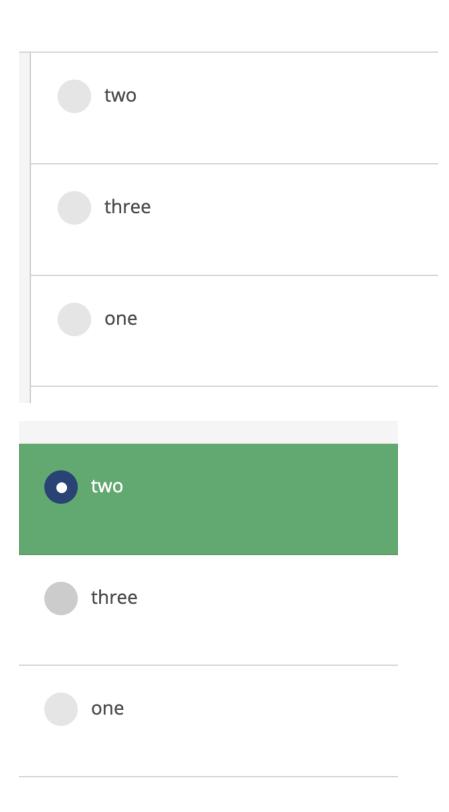
15. An operator able to check whether two values are not equal is coded as:





16. How many hashes will the following snippet send to the console?

```
for i in range(-1, 1):
    print("#")
```



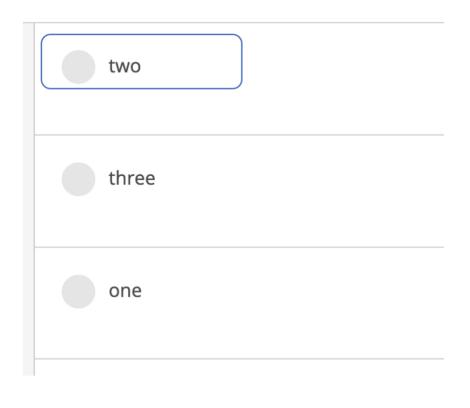
17. Take a look at the snippet and choose one of the following statements which is true

```
nums = []
vals = nums
vals.append(1)
    vals is longer than nums
    nums and vals are of the same length
    nums is longer than vals
     vals is longer than nums
    nums and vals are of the same length
     nums is longer than vals
```

18. How many elements does the my_list contain?

 $my_list = [0 for i in range(1, 3)]$





19. A function definition starts with the keyword:

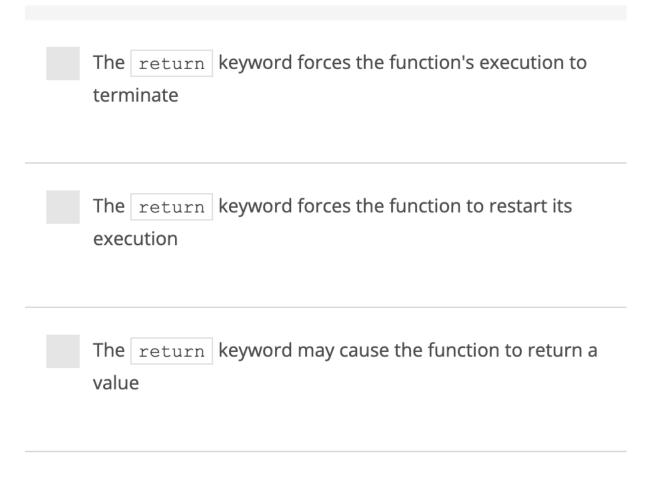


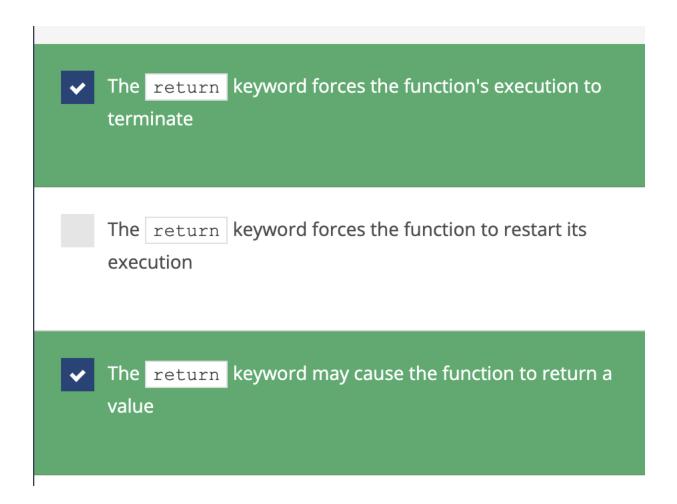
function

def



20. Which of the following statements are true? (Select two answers)





21. Change the "hostname" value from r1 to r2.

```
router1 = {
    'hostname': 'r1',
    'ip': '10.0.0.1',
    'port': 2001,
    'os': 'cisco-ios-xr',
    'vendor': 'cisco',
    'username': 'admin',
    'password': 'cisco123'
}

router1['hostname'] = 'r2'
```

22. Use the correct syntax to print the number of items in the list.

```
list1 = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]
print(......)
print(len(list1))

23.Loop through the items in the router_list.
router_list = ['p1', 'p2', 'p3', 'pe1', 'pe2', 'pe3']
..... router in ....:
    print(router)

for router in router_list:
    print(router)

24.What is the correct syntax to import a module named "requests"?
...... requests
import requests
```

- **25.** Which two options are reasons that the use of APIs is growing? (Choose two.)
 - APIs solve challenges presented by an unreliable network.
 - APIs allow for reuse of server code to service different clients like mobile, web, and so on.
 - APIs enable developers to use cloud services.
 - There are very few use cases for integration with other applications.
 - By using networked APIs, computations are performed faster.
- **26.** What does the Postman code generator feature provide?
 - It generates HTTP response codes based on your API request.
 - It generates programming code snippets of a request.
 - It generates server-side code snippets.
 - It generates code for automated testing and monitoring of an API inside Postman.
- **27.** Which statement about HTTP is true?
 - HTTP is a transport layer protocol.
 - HTTP lacks standardization.
 - HTTP is an application layer protocol.
 - HTTP is a stateful protocol.
- **28.** Which two functionalities do programs like Postman offer? (Choose two.)
 - · testing an API service
 - composing HTTP requests
 - hosting a public API service
 - intercepting and forging API requests
 - analyzing TCP packets
- **29.**Bottom of Form28. Which Cisco management platform is primarily intended to use an SDN approach to manage data center resource?
 - Cisco DNA
 - Cisco ACI
 - Cisco Prime Infrastructure
 - Cisco NSO
 - Cisco ACS
- **30.** Which REST method is supported by the Cisco Webex Teams API?
 - UPDATE

- PATCH
- POST
- OPTIONS

31. Which API can utilize the HTTP GET method?

- NX-API CLI
- NX-API REST
- NETCONF
- CLI
- SNMP

- **32.** Which command binds the host port 80 with the applications (on the container) port 8080 when starting the container?
- -p (or -publish) 80:8080
- -p (or --publish) 8080:80
- -p (or --publish) 80:8080
- No additional command needs to used, because Docker automatically binds those ports.
- **33.** Which two options are essential CI/CD pipeline components? (Choose two.)
- latest software tools available
- code repository
- build system
- Python modules
- SDN controller
- reliable network connection
- 34. Which statement about bare-metal servers is correct?
- It is very easy to replace physical servers.
- Bare-metal servers have performance, security, and reliability advantages.
- It is not possible to provide resource isolation between containers on bare-metal servers using container technology.
- Resources are shared and cannot be optimized for a specific workload on a physical server.
- **35.** Which of the following statements is most correct?
- Docker allows you to run images and build containers.
- Docker allows you to run containers and build images.
- Docker allows you to run and build containers.
- Docker allows you to run and build images.
- **36.** Information on how to build a Docker image is written in a file named:
- Dockerfile
- Jenkinsfile
- docker-compose
- dockerimage
- **37.** What happens if you attempt to perform a Docker build based on an image that has not been previously referenced on your machine?
- Docker will return a 408: image not found message.

- Docker will return a 404: file not found message.
- Docker will pull the image from GitHub.
- Docker will pull the image from Docker Hub.

38. The markup language used to write Docker playbook is:

- JSON
- YAML
- XML
- HTML

- **39.** Which three statements are primary attributes of next-generation programmatic interfaces? (Choose three.)
 - They must support different types of transport: HTTP, SSH, and TLS.
 - They must be flexible and support different types of encoding formats, such as TCL and Python.
 - They must support different types of transport: HTTPS, Telnet, and TCP.
 - There must be extensible and open APIs: REST, RESTCONF, NETCONF, and gRPC.
 - They must be flexible and support different types of encoding formats, such as XML and JSON.
 - They must be proprietary and under strict license agreements.
- **40.** Which two encoding types are supported by RESTCONF? (Choose two.)
 - REST
 - HTML
 - JSON
 - XML
 - HTTP
- **41.** Which two options about YANG statements are correct? (Choose two.)
 - Multiple leaf statements can exist within a list.
 - Multiple leaf statements can exist within a leaf-list.
 - A container can contain other containers.
 - A container cannot contain other containers.
 - A container cannot be augmented.
- **42.** Which two statements about Ansible are true? (Choose two.)
 - Ansible is subscription-based.
 - Ansible is free and open source.
 - Ansible enables IaC.
 - Ansible is used for automation.
 - Ansible requires a dedicated server.
 - Ansible requires a Red Hat subscription.
- **43.** Which keyword is required in an Ansible playbook?
 - gather facts

- hosts
- services
- destinations
- machines
- peers
- **44.** Which two protocols are considered modern APIs for managing Cisco IOS XE network devices? (Choose two.)
 - Telnet
 - SSH
 - HTTP
 - NETCONF
 - RESTCONF
- 45. What does SDN stand for?
 - scalable designed network
 - switch-designated node
 - software-defined network
 - severity delineated nonaccess
 - software-defined nodes