```
module: ietf-ip
 augment /if:interfaces/if:interface:
  +--rw ipv4!
  |  +--rw enabled?      boolean
  |  +--rw forwarding?   boolean
  |  +--rw mtu?          uint16
  |  +--rw address* [ip]
  |  |  +--rw ip                        inet:ipv4-address-no-zone
  |  |  +--rw (subnet)
  |  |  |  +--:(prefix-length)
  |  |  |  |  +--rw prefix-length?          uint8
  |  |  |  +--:(netmask)
  |  |  |     +--rw netmask?             yang:dotted-guad (ipv4-non-contiguous-netmasks)?
  |  |  +--ro origin?                    ip-address-origin
  |  +--rw neighbor* [ip]
  |     +--rw ip                         inet:ipv4-address-no-zone
  |     +--rw link-layer-address         yang:phys-address
```

A. list
B. leaf-list
C. container
D. submodule

Correct Answer: A
Explanation:
Symbols after data node names: "?" means an optional node, "!" means a presence container, and "*" denotes a list and leaf-list.

QUESTION 18
The automation engineer must replace device configuration using RESTCONF. How is this configured using the Python library Requests?

A. delete()
B. post()
C. put()
D. patch()

Correct Answer: C
Explanation:
https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/prog/configuration/166/b_166_programmability_cg/restconf_prog_int.html

QUESTION 19
Which two Netmiko methods are used to configure a device? (Choose two.)

A. send_config()
B. send_control_from_file()
C. send_config_set()
D. send_command()
E. send_config_from_file()

Correct Answer: CE
Explanation:
https://pynet.twb-tech.com/blog/automation/netmiko.html

QUESTION 20

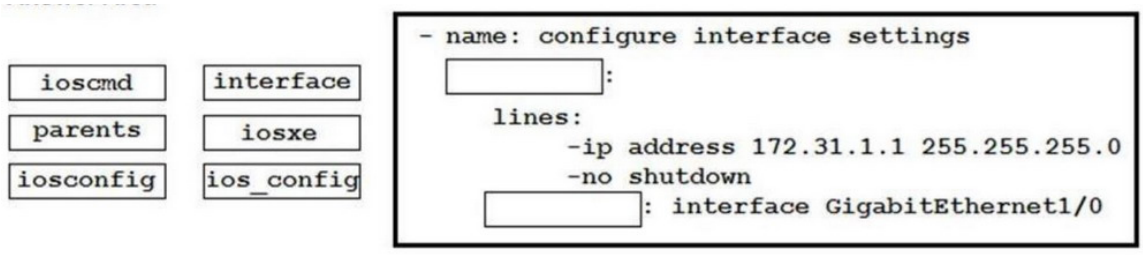
Refer to the exhibit. An engineer creates an Ansible playbook to configure VRF information using a local_vrfs variable. The code must be completed so that it can be tested. Which string completes the code?

```
- name: Create VRFs as defined by local_vrfs
  ios_vrf:
    vrfs: "{{ local_vrfs }}"
    state: [          ]
  register: addvrf
```

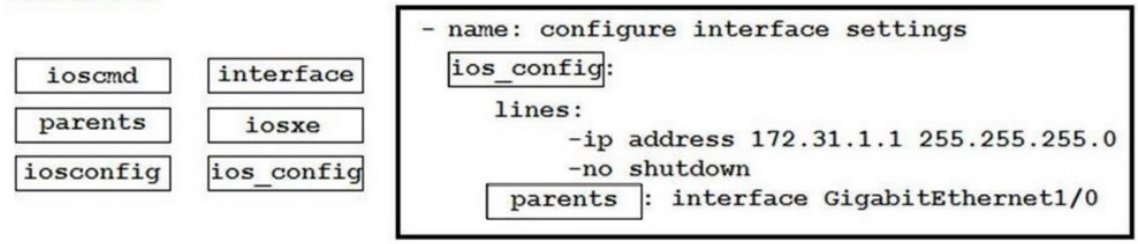
A. present
B. up
C. on
D. active

Correct Answer: A
Explanation:
https://docs.ansible.com/ansible/latest/modules/ios_vrf_module.html

QUESTION 21
DRAG DROP
Drag and drop the commands to the Ansible playbook that applies configuration to an interface on a Cisco IOS XE device. Not all options are used.



Correct Answer:



QUESTION 22
Refer to the exhibit. Which XML tag completes this NETCONF telemetry subscription with a Cisco IOS XE device?

```
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <establish-subscription
     xmlns="urn:ietf:params:xml:ns:yang:ietf-event-notifications"
     xmlns:yp="urn:ietf:params:xml:ns:yang:ietf-yang-push">
   <stream>yp:yang-push</stream>
   <yp:xpath-filter>/mdt-oper:mdt-oper-data/mdt-subscriptions</yp:xpath-filter>
   <yp:              >1000</yp:              >
  </establish-subscription>
</rpc>
```

A. crontab
B. cadence
C. frequency
D. period

Correct Answer: D
Explanation:
https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/prog/configuration/1610/b_1610_programmability_cg/model_driven_telemetry.html

QUESTION 23
Which two statements are benefits of YANG-push telemetry data over traditional data collection methods? (Choose two.)

A. The subscription requests use less bandwidth than SNMP polls.
B. It uses UDP rather than TCP.
C. You can precisely define data subscriptions.
D. It scales better than SNMP.
E. It is supported on more devices than SNMP.

Correct Answer: BC
Explanation:
https://tools.ietf.org/id/draft-song-ntf-01.html

QUESTION 24
Fill in the blank to complete the statement.

[ ] is a solution for automating the configuration of a device when it is first powered on, using DHCP and TFTP.

Correct Answer: Zero touch provisioning (ZTP)
Explanation:
https://developer.cisco.com/docs/ios-xe/#!day-zero-provisioning-quick-start-guide

QUESTION 25
Which tag is required when establishing a YANG-push subscription with a Cisco IOS XE device?

A. <yp:period>

B. <yp:subscription-result>
C. <yp:subscription-id>
D. <yp:xpath-filter>

Correct Answer: D
Explanation:
https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/prog/configuration/1612/b_1612_programmability_cg/model_driven_telemetry.html

QUESTION 26
Refer to the exhibits. An engineer creates a Python scripts using ncclient to display interface information. The code must be completed so that it can be tested. Which expression completes the highlighted section in the format call?

```
from device_info import ios_xe1
from ncclient import manager
import xmltodict

netconf_filter = open('filter-ietf-interfaces.xml").read()

if __name__ == '__main__':
   with manager.connect(host=ios_xe1["address"],
                        port=ios+xe1["port"],
                        username=ios+xe1["username"],
                        password=ios+xe1["password"],
                        hostkey_verify=False) as m:

     netconf_reply = m.get(netcong_filter)

     intf_details = xmltodict.parse(netconf_reply.xml)["rpc-reply"]["data"]
     intf_config = intf_details["interfaces"]["interface"]
     intf_info = intf_details["interfaces-state"]["interface"]

     print("")
     print("Interface Details:")
     print(" Name: {}".format(                ["name"]))
     print(" Description: {}".format(intf_config["description"]))
     print(" Type: {}".format(intf_config["type"]["#text"]))
     print(" MAC Address: {}".format(intf_info["phys-address"]))
     print(" Packet Input: {}".format(intf_info["statistics"]["in-unicast-pkts"]))
     print(" Packet Output: {}".format(intf_info["statistics"]["out-unicast-pkts"]))
```

```
<filter>
  <interfaces xmlns="urn:ietf:params:xml:ns:yang:ietf-interfaces">
    <interface>
      <name>GigabitEthernet2</name>
    </interface>
  </interfaces>
  <interfaces-state xmlns="urn:ietf:params:xml:ns:yang:ietf-interfaces">
    <interface>
      <name>GigabitEthernet2</name>
    </interface>
  </interfaces-state>
</filter>
```

A. intf_info
B. intf_config
C. intf_get
D. intf_config[0]

Correct Answer: A
Explanation:
The highlighted format cell for print is for the host.

Reference:
https://github.com/CiscoDevNet/dnac-python-path-trace/blob/master/path_trace.py

QUESTION 27
Refer to the exhibit. What is the correct ncclient method to use to collect the running configuration of a Cisco IOS XE device that uses NETCONF?

```
from ncclient import manager
with manager.connect(
     host='10.0.0.1',
     port=12022,
     username='cisco',
     password='cisco',
     hostkey_verify=False,
     allow_agent=False,
     look_for_keys=False,
     device_params={'name': 'iosxe'},
  ) as m:
```

A. config=m.copy_config(source='running')
B. config=m.get(source='running')
C. config=m.collect_config(source='running')
D. config=m.get_config(source='running')
Correct Answer: A
Explanation:
https://ncclient.readthedocs.io/en/latest/

QUESTION 28
Fill in the blanks to complete this API request against the Cisco SD_WAN vManage Statistics API, which specified a deviceId of 260faff9-2d31-4312-cf96-143b46db0211, a local-color of biz-internet, and a remote-color of gold.

https://vmanage-ip-address:8443/dataservice/device/app-route/statistics?[ ]260faff9-2d31-4312-cf96-143b46db0211[ ] biz-internet [ ] gold

Correct Answer: deviceID=, local-color, remote-color
Explanation: