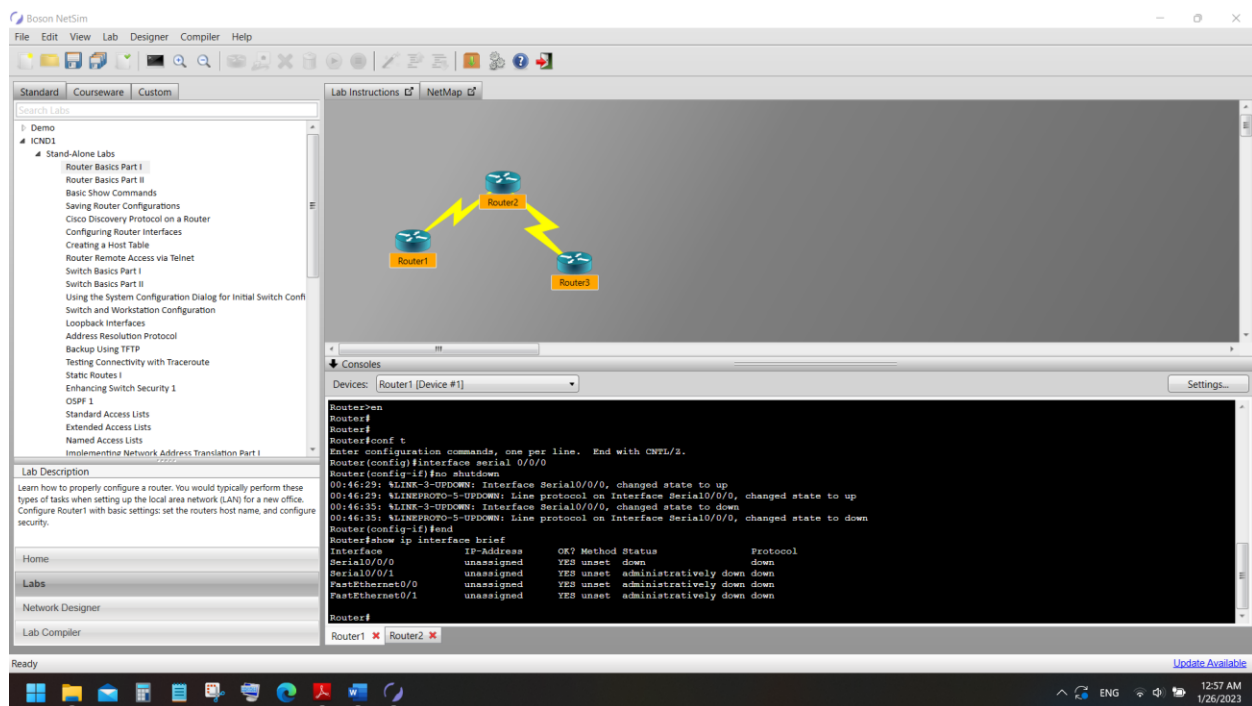


سوال 2) روش enable password رمز به صورت plaintext می گیرد و استفاده می کند ولی enable secret آن را به صورت رمزنگاری شده در می آورد و ایمن تر است.

سوال 4) با دستور write erase

سوال 7) روتر ابتدا up می شود تا به بقیه وصل شود ولی چون interface، ارتباطی ندارد down می شود.

سوال 8)



up است چون مسیریاب فعال است و down است چون دیتایی جابجا نمی شود.

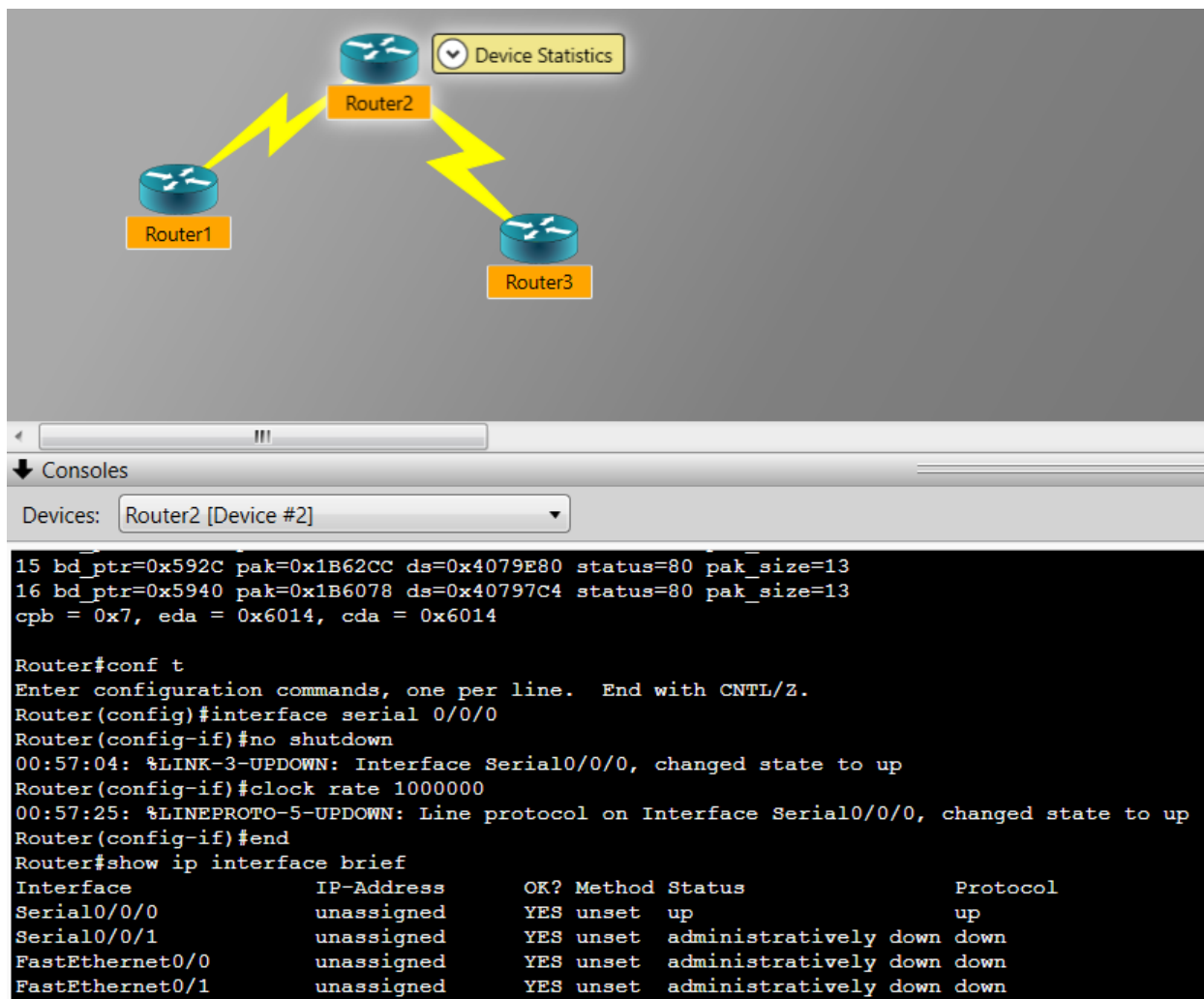
سوال (9)

The screenshot shows the Boson NetSim software interface. On the left, there is a 'Lab Instructions' pane with a tree view containing 'Demo', 'ICND1', and 'Stand-Alone Labs'. The 'Stand-Alone Labs' section is expanded, showing various tasks like 'Router Basics Part I', 'Router Basics Part II', 'Basic Show Commands', etc. Below this is a 'Lab Description' pane with text about configuring a router. The main area displays a network diagram with three routers: Router1, Router2, and Router3. Router2 is connected to both Router1 and Router3. Below the diagram is a 'Consoles' pane showing the command-line interface for Router2. The console output includes the command 'Router>show controller interface Serial0/0/0' and a detailed status report for the HD unit, including buffer size, HD unit voltage, and a list of 16 entries with their status and packet size.

```
Router>show controller interface Serial0/0/0
HD unit 0, idb = 0x1A8B28, driver_structure at 0x1B4BA0
buffer size 1524 HD unit 0 V.25 DCE cable
cpb = 0x7, sda = 0x58DC, cda = 0x58F0
RX ring with 16 entries at 0x4075800
00 bd_ptr=0x5800 pak=0x1B5E24 ds=0x4079108 status=80 pak_size=13
01 bd_ptr=0x5814 pak=0x1B58B8 ds=0x4080384 status=80 pak_size=13
02 bd_ptr=0x5828 pak=0x1B880C ds=0x4080A40 status=80 pak_size=69
03 bd_ptr=0x583C pak=0x1B8110 ds=0x407F60C status=80 pak_size=13
04 bd_ptr=0x5850 pak=0x1B72BC ds=0x407E250 status=80 pak_size=13
05 bd_ptr=0x5864 pak=0x1B7C68 ds=0x407E894 status=80 pak_size=13
06 bd_ptr=0x5878 pak=0x1B7A14 ds=0x407E1D8 status=80 pak_size=13
07 bd_ptr=0x588C pak=0x1B77D0 ds=0x407DB1C status=80 pak_size=13
08 bd_ptr=0x58A0 pak=0x1B756C ds=0x407D460 status=80 pak_size=69
```

با توجه به خروجی بله.

سوال 10)



The diagram shows a network topology with three routers: Router1, Router2, and Router3. Router2 is at the top, connected to Router1 on the left and Router3 on the right. A 'Device Statistics' button is next to Router2. Below the diagram is a console window for Router2 [Device #2].

```
15 bd_ptr=0x592C pak=0x1B62CC ds=0x4079E80 status=80 pak_size=13
16 bd_ptr=0x5940 pak=0x1B6078 ds=0x40797C4 status=80 pak_size=13
cpb = 0x7, eda = 0x6014, cda = 0x6014

Router#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface serial 0/0/0
Router(config-if)#no shutdown
00:57:04: %LINK-3-UPDOWN: Interface Serial0/0/0, changed state to up
Router(config-if)#clock rate 1000000
00:57:25: %LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/0/0, changed state to up
Router(config-if)#end
Router#show ip interface brief
Interface          IP-Address      OK? Method Status        Protocol
Serial0/0/0        unassigned      YES unset  up            up
Serial0/0/1        unassigned      YES unset  administratively down down
FastEthernet0/0    unassigned      YES unset  administratively down down
FastEthernet0/1    unassigned      YES unset  administratively down down
```

چون تنظیمات به درستی configure شده اند و درنتیجه ارتباط برقرار است و جابجای دیتا صورت می گیرد.

سوال 11) no shutdown نیاز است چون interface را فعال می کند و نرخ کلاک لازم نیست چون اگر آن را مقدار دهی نکنیم با مقدار دیفالتش ران می شود.

سوال 12)

```
Router#ping 10.1.1.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 10.1.1.2, timeout is 2 seconds:
.....
Success rate is 0 percent (0/5), round-trip min/avg/max = 1/2/4 ms
Router#
```

سوال 13)

```
Router#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface serial 0/0/0
Router(config-if)#ip address 172.16.10.0 255.255.255.0
Bad mask /24 for address 172.16.10.0
Router(config-if)#end
Router#ping 172.16.10.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 172.16.10.1, timeout is 2 seconds:
.....
Success rate is 0 percent (0/5), round-trip min/avg/max = 1/2/4 ms
Router#
```

Router1 ✖ Router2 ✖ Router3 ✖

سوال 14)

```
Router#sh cdp neighbors
Capability Codes: R - Router, T - Trans Bridge, B - Source Route Bridge
S -Switch, H - Host, i - IGMP, r - Repeater
Device ID         Local Intrfce   Holdtme    Capability Platform Port ID
Router            Ser0/0/0       149        R          2811     Ser 0/0/0
```

ستون‌ها از راست به چپ به ترتیب، سریال port، platform همسایه، ظرفیت همسایه، زمانی که می‌تواند بدون update مقادیر را hold کند، سریال interface و نام روتر مبدا اند.

سوال 15)

```
Router#sh cdp neighbors detail
-----
Device ID: Router
Entry address(es):
  IP address: 10.1.1.1
Platform: Boson 2811 , Capabilities: Router
Interface: Ser0/0/0, Port ID (outgoing port): Ser 0/0/0
Holdtime: 154 sec

Version :
Boson Operating System Software
Software, Version 12.3(16), RELEASE SOFTWARE (fc2)
Copyright (c) 1986-2023 by Systems, Inc.
Compiled Fri 02-Mar-09 17:34 by dchih
```

این اطلاعات منتقل می‌شوند.