frame relay activity ccna exploration:

In this activity, you will configure Frame Relay on the serial 0/0/0 interfaces of routers R1, R2, and R3. You will also configure two static Frame Relay maps on each router to reach the other two routers. Although the LMI type is autosensed on the routers, you will statically assign the type by manually configuring the LMI.

Task 1: Configure Frame Relay

Step 1. Configure Frame Relay encapsulation on the serial 0/0/0 interface of R1.

```
R1(config)#interface serial0/0/0
R1(config-if)#encapsulation frame-relay
R1(config-if)#no shutdown
```

Step 2. Configure Frame Relay encapsulation on the serial 0/0/0 interfaces of R2 and R3.
Step 3. Test connectivity.

From the command line on PC1, verify connectivity to the PC3 host, located at 192.168.30.10, using the ping command.

The ping from PC1 to PC3 should fail since the R1 router does not know how to reach the 192.168.30.0 network.

R1 must be configured with a Frame Relay map so that it can find the next hop destination to reach that network.

Task 2: Configure Static Frame Relay Maps

Step 1. Configure static maps on R1, R2, and R3.
Each router requires two static maps to reach the other routers. The DLCIs to reach these routers are as follows:

Router R1:
```
To reach router R2, use DLCI 102 located at IP address 10.1.1.2.
To reach router R3, use DLCI 103 located at IP address 10.1.1.3.
```

Router R2:
```
To reach router R1, use DLCI 201 located at IP address 10.1.1.1.
To reach router R3, use DLCI 203 located at IP address 10.1.1.3.
```

Router R3:
```
To reach router R1, use DLCI 301 located at IP address 10.1.1.1.
To reach router R2, use DLCI 302 located at IP address 10.1.1.2.
```

The routers must also support OSPF: look on the internet for information of how to do this in combination with frame relay

Task 3: Configure the Frame Relay LMI Type

The Frame Relay cloud contains switches that are using ANSI as the LMI type. Therefore, all the Frame Relay links must be manually configured to use ANSI.

Configure ANSI as the LMI type on R1, R2, and R3.
Enter the following command on the serial interface for each router.

```
R1(config-if)#interface s0/0/0
R1(config-if)#frame-relay lmi-type ansi
```

Step 3. Test connectivity: PC1 and PC3 should e able to successfully ping each other and the web server.