

**Question 1: Viewing Certificates** Browse to <https://cs.unc.edu> and view the certificate chain in your browser. Who issued the certificate for cs.unc.edu? Who is intermediate certificate authority? Who is the trust anchor?

**Question 2: Certificate Chains** The signature shown in certificate (1) in the blow figure is created using the (public/private) key of which entity?

```
subject: www.amazon.com
public key: RSA, 2048, 65537, 99:5C:32:A5:F8:BD:7E:...
issuer: DigiCert Global CA G2
<signature>

subject: DigiCert Global CA G2
public key: RSA, 2048, 65537, D3:48:7C:BE:F3:05:86:5D:...
issuer: DigiCert Global Root G2
<signature>

subject: DigiCert Global Root G2
public key: RSA, 2048, 65537, BB:37:CD:34:DC:7B:6B:...
issuer: DigiCert Global Root G2
<signature>
```

**Question 3: Web Browsing and Certificates** Answer the following questions given the certificate chain shown in the figure below.



3.1. The user must have been browsing to:

- www.amazon.com
- ca.g2.digicertglobal.com
- root.g2.digicertglobal.com
- cannot be determined from the information given

3.2. In order to verify this certificate chain, the user's browser must already know

- www.amazon.com's public key
- DigiCert Global CA G2's public key
- DigiCert Global Root G2's public key
- The browser does not need any additional info.

3.3. Who is the trust anchor in this certificate chain?

- www.amazon.com
- DigiCert Global CA G2
- DigiCert Global Root G2
- RSA, 2048, 65537