1a) The virus would spread at all levels since the more confidential levels can read it.  
1b) The virus would spread only at the high level since under Bell-LaPadula the lower levels would not be able to access the virus, and the virus would not be able to write down.  
  
2a) The virus would not spread to the confidential levels.  
2b) The virus would spread to all levels since the virus would be able to write at all levels.  
  
3) <html>

<title>Encrypted HTML</title>

<body>Hello world!</body>

</html>

4a) **1 or 1=1**4b) Validating input as valid can help prevent this. Also using a parameterized query.  
4c) a’ or ‘a’=’a

5) ulimit –u : This stops the number of process someone can run.  
ulimit –t: This makes sure that a process cannot use more than a certain quantity of CPU time.  
  
6a) sha256sum  
6b) 755c8886a28f93d4cec317c1159405da4271fd11206509234be3c18ec0c09dbd  
6c) b160b8995a741b931f0018edd949dca6f267a233860030bc20957e8ce1b20d95

7) FLAG{OUTTSYOPHNDERHIN}  
  
8) 