ECE363 Assignment 5

Student ID:
Student Name:

1. For a simplified HTML document with URL http://a.b.com/index.html

    <html>
     <img src="image/fig1-small.jpg">
    <img src="http://x.y.com/image/fig2.gif">
    <img src="http://a.b.com/image/fig3.gif">
    </html>

    For a web browser that loads images (JPEG and GIF files) automatically, how many TCP connections will be opened by the browser to display this Web page properly, and:
    (a) non-persistent HTTP connections are used, or
    (b) persistent HTTP connections with non-pipelining are used, or
    (c) persistent HTTP connections with pipelining are used.

2. For a simplified HTML document with URL http://a.b.com/index.html

    <html>
     <img src="image/fig1-small.jpg">
    <img src="http://x.y.com/image/fig2.gif">
    <img src="http://a.b.com/image/fig3.gif">
    </html>

    For a web browser that loads images (JPEG and GIF files) automatically, how long (in round-trip time) does it take to display this Web page properly (DNS overhead is omitted), if all files are small enough to be accommodated in one packet, and:
    (i) non-persistent HTTP connections are used, with no parallel TCP connections, or
    (ii) non-persistent HTTP connections are used, with parallel TCP connections, or
    (iii) persistent HTTP connections with non-pipelining are used, or
    (iv) persistent HTTP connections with pipelining are used.