In THIS FILE, you will find a program that submits a request via UDP port 53 to a DNS server (default "ebon.hope.edu"). Study the program and see why it works. Run the program and view the actions via Wireshark (use "udp.port==53" to filter the data).
Near the bottom of the program, you will see these lines:

```
// And now we interpret the response!
// FILL THIS IN!
```

You are to add code to this that will interpret the response from the server. You will get an array of bytes back (in the variable "rec") and you should add code that will print to "System.out" the meaning of the data in that array of bytes. You will have to add code to print the type of response and then the answers to the question if they are included.
Submit **one** souce Java file. No separate classes or compiled code.
FYI: Processing DNS names from the DNS packet is confusing. This function helps. It takes the "bytes" collection of bytes in the packet and a starting position for the name. It prints the name through `System.out.println()`. **Understand it before you use it.**

```
public static int printDNSName(byte bytes[],
int start) {
    int pos = start;
    while (bytes[pos] != 0) {
        if (pos != start)
System.out.print(".");
        int length = bytes[pos];

        // POINTER!  We recursively print from
a different place in the packet
        if (length == -64) {
            int pos2 = bytes[pos+1] & 0xFF;
            printDNSName(bytes, pos2);
            pos++;
            break;
```

```
        // Otherwise the "length" is the
number of characters in this part of
        // name.
        } else {
            for (int i=1; i<=length; i++) {

System.out.print((char)bytes[pos+i]);
            }
            pos += length+1;
        }
    }
    pos ++;
    return pos;
 }
```