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CSE 530

Lab 5 Questions

1.
 - a. Gethostbyaddr – The correct syntax for gethostbyaddr is: struct hostent *gethostbyaddr(const void *addr, socklen_t len, int type);. The arguments passed are host address addr, its length len and the type of address. The return type is a hostent structure type or a null pointer if an error occurs.
 - b. Gethostbyname – The correct syntax for gethostbyname is: struct hostent *gethostbyname(const char *name). The argument passed is the host name. While the function returns a hostent struct type for the provided name or a null if error has occurred.
2.
 - a. In gethostbyname.c - The first block of code creates necessary variables and creates an error check to make sure argv was passed correctly. The second block of code creates the hostent host and checks for error on its creation. The third block of code prints out the host's official name. The fourth block of code creates a loop to print out all the aliases for that host. The fifth block prints out the address type for the host. Lastly the last four loop prints out all the IP addresses for the intended host.
 - b. In gethostbyaddr – The first block of code creates all the necessary variables and checks error for the argv. The second block of code uses the memset and addr.sin_addr function to get correct addresses from the provided addr and creates the host. The third block of code prints the host's official name. The fourth block creates a for loop to print out all the aliases. The fifth block prints out the address type. And lastly the sixth block creates a four loop to print out all the IPs for the host.
3.
 - a. There are four different IP addresses for yahoo: 98.138.252.39, 98.138.252.38, 206.190.39.42, 206.190.39.43.
 - b. The official name for yahoo is atsv2-fp.wg1.b.yahoo.com.
 - c. The official names of the IP addresses are: 98.138.252.39 - media-router-fp2.prod.media.vip.ne1.yahoo.com, 98.138.252.38 - media-router-fp1.prod.media.vip.ne1.yahoo.com, 206.190.39.42 - media-router-fp1.prod.media.vip.gp1.yahoo.com, 206.190.39.43 - media-router-fp2.prod.media.vip.gp1.yahoo.com.