

Lab 4

1.

Name	Syntax	Arguments	Return values
gethostbyaddr	Struct hostent* gethostbyaddr(const char* addr, int len, int type)	Addr: pointer to the address for which we get host len: the length of addr type: address family	A pointer to a hostent structure where host information is located.
gethostbyname	Struct hostent* gethostbyname(const char* name)	Name: the hostname for which we find the host	A pointer to a hostent structure where host information is located.

2. **gethostbyname.c:** The program gets the hostname from a command-line argument and calls “gethostbyname” function on it. It will print the found host’s hostname, aliases, address type, and it’s IP addresses.

gethostbyaddr.c: The program gets the IP address and stores it into a “sockaddr_in” structure. That structure’s new address is passed into a “gethostbyaddr” function. The resulting “hostent” structure would have its name, aliases, address type, and IP addresses listed.

3. From www.yahoo.com, we have 4 IP addresses. The official name is “atsv3-fp.wg1.b.yahoo.com”.
206.190.39.42 → “media-router-fp1.prod.media.vip.gq1.yahoo.com”
98.138.252.38 → “media-router-fp1.prod.media.vip.ne1.yahoo.com”
206.190.39.43 → “media-router-fp2.prod.media.vip.gq1.yahoo.com”
98.138.252.39 → “media-router-fp2.prod.media.vip.ne1.yahoo.com”

4. To compile a program for multithreading with gcc and g++ use “-pthread”.