

Birla Institute of Technology & Science, Pilani, K. K. BIRLA Goa campus
Computer Networks
Second Semester 2015-2016
Lab 3 Worksheet

Questions :

1. Modify the given DNS resolution program (dns_wiki.c) to try queries of type
`./dns_wiki dns_name service`

few sample services are: *http, smtp, www*

few sample dns_names are: *www.google.com, www.bits-pilani.ac.in*

Specify hints to the `getaddrinfo()` by indicating the address family or the socket type.

One example output is:

```
$ ./dns_wiki www.google.com http
IPv4, SOCK_STREAM, TCP, 216.58.213.100
hostname: lhr25s02-in-f100.1e100.net
IPv4, SOCK_DGRAM, UDP, 216.58.213.100
hostname: lhr25s02-in-f4.1e100.net
IPv6, SOCK_STREAM, TCP, ::2a00:1450:4009:80f:0:0
hostname: lhr25s02-in-x04.1e100.net
IPv6, SOCK_DGRAM, UDP, ::2a00:1450:4009:80f:0:0
hostname: lhr25s02-in-x2004.1e100.net
```

2. Modify the echo TCP server to work as concurrent server with the help of `fork()`. Write enough code to make sure the server child processes do not remain after their work is done (take care of zombie children).