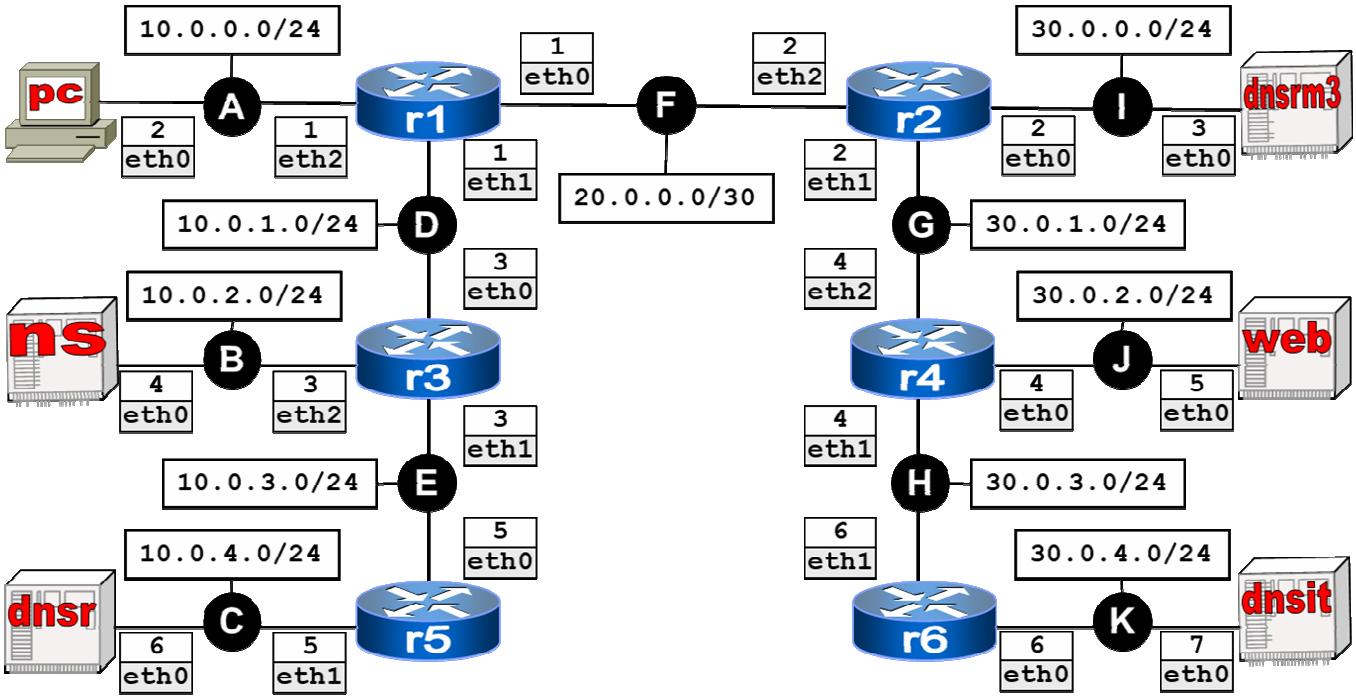
Cognome e nome: ..... Matricola: ..... PC:.....

IDC– Esempio di prova intermedia dell'8-11-2021



Using Kathará, implement the network depicted in the above figure and described below.

- ☐ r1, r3, and r5 run a RIPv2 routing protocol among them. r2, r4, and r6 also run a RIPv2 routing protocol among them. r1 and r2 do not exchange any routing information. r1 has a static route for network 30.0.0.0/8 towards 20.0.0.2 and propagates 30.0.0.0/8 to its RIPv2 neighbors. r2 has a static route for network 10.0.0.0/8 towards 20.0.0.1 and propagates 10.0.0.0/8 to its RIPv2 neighbors. No router has a default route. All other hosts do not run any routing protocol but have a default route to the router they are attached to.
- ☐ pc is a client that would like to access the Web page http://www.uniroma3.it/index.html; its default name server is ns. Name server ns is not an authority for any zone but just offers name resolution to clients. web is a Web server with name www.uniroma3.it and offers a Web page containing the names of the students participating to the group. dnsr is the root name server. dnsit is a name server authority for the it zone. dnsrm3 is a name server authority for uniroma3.it.

- ☐ **Hints:** Insert in the file **`etc/bind/named.conf`** of the name server ns the following lines to allow recursive DNS query from any host in the network:

```
options {
 allow-recursion {0/0; };
};
```

Goals:

- All hosts and routers can ping each other.
- pc can access the Web page at http://www.uniroma3.it/index.html served by web.