Topic 02
The Lord of the Rings

Given the following areas and distance,in km, between them.
*The numbers in brackets specify the population size of the area.

	The Shire	Gondor	Eriador	Arnor	Rohan	Cardolan
The Shire (254)	0					
Gondor (127)	86	0				
Eriador (1020)	101	70	0			
Arnor (511)	87	56	76	0		
Rohan (30)	120	87	384	60	0	
Cardolan (1022)	153	1011	144	78	949	0

In addition to the above specification, there's The Mordor where Sauron lives.
- Choose an appropriate network address and create subnets to assign to each of the places with the least amount of waste.
- Assign IP addresses to all the devices and interfaces.
- The Mordor (5000) have a web server to spread their threat messages and disclose the ring's current position.
- Establish connections among all the networks with the shortest route possible.
    - Must have at least one floating route.
    - Must have a backup system to handle missing routing entries.
    - Configure at least one network to be routed dynamically and one to be routed statically.
- Showing 2 end devices per network is good enough to represent the whole population.
    - Arnor has laptops and printers
- You need to be able to ping each other after all the setups are complete.

Deliverables
- The network mentioned above should be implemented in packet tracer, with necessary devices and full configuration.
- After completion you should be able to test the conditions imposed.
- As hardcopies, you will have to submit the followings:
    - Network topology diagram with proper labels
    - The configurations of all the routers that you have implemented.
    - VLSM/Network address table.
    - IP address table