In Westeros, there are seven kingdoms as follows along with their population size and other characteristics of each kingdom:

1. The North – Population size: 200
    a. The North, being the kingdom on the border, connects to the Internet (Outside the wall). Consequently, all the other kingdoms communicate with the outside world via the North kingdom.
    b. Has enough budget to buy 2 real IPs only.

2. The Mountain and The Vale – Population size 80
    a. The Vale has a restaurant called ‘A Restaurant has No Name’ and uses 10 of the IPs of the Vale.

3. The Rock – Population size 1024
    a. The first 512 IPs are given to the people who live in the castle
    b. The latter 512 IPS are given to the people who live outside the castle
4. The Stormlands – Population size 250
5. The Reach
    a. Castles under The Reach
        i. Old Oak - Population size: 10
        ii. Grassy Vale - Population size: 50
    b. Other villages - Population size: 10

Outside the wall:

- Assume that this is the outside network for the seven kingdoms that they use to connect to the internet.
- Has a single web server (browseable)

Overall Specifications:

- Use Routers and Switches where appropriate.
- You may need to apply VLSM more than once
- The Stormlands only allow castles of other kingdoms to access their network. Packets from any other place/network is automatically denied.
- Install at least 2 PC/Laptop for each individual network.
- Have at least one backup route for two cities
- Use summarization if needed anywhere
- Use at least one network with static routing, and for others use RIPv2.
- You may use at max two PCs to represent all the hosts of a network (no need to put in 32 PCs if it says there are 32 people in the area.

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 network topology diagram with proper labels and also all the configurations of all the routers that you have implemented.