CENG422 Final Project

Design the network for a company... Assume that the following is true:
1. There are two buildings next to each other: A factory and an office building. There is also a remote branch office.
2. The main factory building has 3 floors; each floor needs at least 8 Ethernet ports to connect their devices.
3. The office building has 2 floors. Each floor has 2 offices, and each office needs at least 2 Ethernet ports.
4. The company also has a leased line from one of the offices, to another branch, connected via a router, a leased line and a modem. (for our simulation, you can connect the branch to the office via two routers with serial ports, and have the two "talk" to each other via PPP or another protocol of your liking).
5. The branch has a modem, a router, and needs 2 Ethernet ports.

Do the following:
1. Make a diagram of the entire network. You may use any tool , including paper and pencil.
2. Assign IP address groups to each group, marking them on the diagram.
3. Decide where each switch and router should be.
4. Assume all devices are CISCO.
5. Using GNS3, create the network on your computer,
6. Configure each router, add at least 1 virtual PC to each office.
7. Verify that each section of the network can "see" all other sections by pinging from one PC to another from every PC.
8. Submit all proof: diagram(s), gns3 diagram(s), router/switch configurations (gns3 has an Export Config option), and a blog-like paper describing what you did, and why you chose those devices and configurations, how it went, what you did first, then what else.. etc..

DEADLINE: Submit all work by February 1st 2021.

1. Yan yana iki bina var: Bir fabrika ve bir ofis binası. Uzak bir şube de var.
2. Ana fabrika binası 3 katlıdır; her katın cihazlarını bağlamak için en az 8 Ethernet portuna ihtiyacı vardır.
3. Ofis binası 2 katlıdır. Her katta 2 ofis vardır ve her ofisin en az ihtiyacı vardır 2 Ethernet bağlantı noktası.
4. Şirket ayrıca ofislerden birinden, başka bir şubeye, yönlendirici, kiralık hat ve modem üzerinden bağlanan bir kiralık hatta sahiptir. (simülasyonumuz için şubeyi seri portlu iki yönlendirici üzerinden ofise bağlayabilir ve ikisinin PPP veya beğeninize göre başka bir protokol aracılığıyla birbirleriyle "konuşmasını" sağlayabilirsiniz).
5. Şubenin modemi, yönlendiricisi var ve 2 Ethernet bağlantı noktasına ihtiyacı var.