

# WEEK 2

## The Network Layer

- 1) ARP stands for - **Address Resolution Protocol**.
- 2) A network device that knows how to forward data along to other networks is known as a **router**.
- 3) Interior gateway protocols are used by routers in order to share information within a single - **autonomous system**.
- 4) Ranges of IP addresses that anyone can use for their internal networks are known as - **Nonroutable Address Space**.
- 5) Using logical operators, 1 AND 0 = **False**
- 6) A single octet in an IP address represents what range of decimal numbers : **0-255**
- 7) What protocol communicates data between routers representing the edges of autonomous systems - **Exterior Gateway**
- 8) What is eight bits of data called - **Octet**.
- 9) Which is a valid IP address - **128.42.64.78**
- 10) What is the process of taking a single IP datagram and splitting it up into several smaller datagrams called - **Fragmentation**.
- 11) What is the correct term for the list of IP addresses and the MAC addresses associated with them - **ARP Table**
- 12) What does the subnet mask 255.255.255.0 tell a router - **Which part of an IP address is the subnet ID and which is the host ID.**
- 13) What is the term for the place one network ends and another begins - **Demarcation Point**
- 14) CIDR simplifies how routers and other network devices need to think about the parts of an IP address, but it also allows for more arbitrary network sizes. What does CIDR stand for - **Classless Inter-Domain Routing**
- 15) Which are a type of interior gateway protocol (Check all that apply)
  - a) **Distance Vector protocols**
  - b) **Link state routing protocols**