**What is the IP address of the CIL LMS platform**

**52.222.139.125**

**What is the NS IP address for Google, Facebook and Tesla**

Google: 216.58.223.238

Facebook: 102.132.101.35

Tesla: 23.9.66.10

**What is the main difference between IPV4 and IPV6 ADDRESSES?**

The main difference between IPv4 and IPv6 addresses is the number of bits used to represent the address. IPv4 uses a 32-bit address, while IPv6 uses a 128-bit address. IPv6 also provides a larger address space, which allows for more unique addresses, and includes additional features such as auto-configuration and improved security.

**Identify the different classes of IPV4 and provide the range of each class**

IPv4 addresses are divided into five classes: A, B, C, D, and E. Each class has a different range of IP addresses that can be assigned to devices.

Class A addresses range from 1.0.0.0 to 127.255.255.255.

Class B addresses range from 128.0.0.0 to 191.255.255.255.

Class C addresses range from 192.0.0.0 to 223.255.255.255.

Class D addresses are used for multicast and range from 224.0.0.0 to 239.255.255.255.

Class E addresses are reserved for future use and range from 240.0.0.0 to 255.255.255.255.

**What is a MAC address, What is special about the MAC address with the hexadecimal value "FF: FF:FF:FF:FF:FF:"**

A MAC (Media Access Control) address is a unique identifier assigned to a network interface controller (NIC) for use as a network address in communications within a network segment. MAC addresses are usually represented as a six-byte hexadecimal number, and the MAC address with the hexadecimal value "FF:FF:FF:FF:FF:FF" is a special broadcast address that is used to send a message to all devices on a network segment.

**Provide the actual IPV$ address for the following special address types:**

**(a) local loopback address:** The actual IP address for the local loopback address is 127.0.0.1 for IPv4 and ::1 for IPv6.

**(b) Limited Broadcast address:** The limited broadcast address is 255.255.255.255 for IPv4 and ff02::1 for IPv6.