

```

import java.net.*;

public class IPCharacteristics {

    public static void main(String[] args) {

        try {
            InetAddress address =
InetAddress.getByName("FF01:0:0:0:a49c:78ea:c760:d28a%3");

            if (address.isAnyLocalAddress()) {
                System.out.println(address + " is a wildcard address.");
            }
            if (address.isLoopbackAddress()) {
                System.out.println(address + " is loopback address.");
            }

            if (address.isLinkLocalAddress()) {
                System.out.println(address + " is a link-local address.");
            } else if (address.isSiteLocalAddress()) {
                System.out.println(address + " is a site-local address.");
            } else {
                System.out.println(address + " is a global address.");
            }

            if (address.isMulticastAddress()) {
                if (address.isMCGlobal()) {
                    System.out.println(address + " is a global multicast
address.");
                } else if (address.isMCOrgLocal()) {
                    System.out.println(address
                        + " is an organization wide multicast address.");
                } else if (address.isMCSiteLocal()) {
                    System.out.println(address + " is a site wide multicast
address.");
                } else if (address.isMCLinkLocal()) {
                    System.out.println(address + " is a subnet wide multicast
address.");
                } else if (address.isMCNodeLocal()) {
                    System.out.println(address
                        + " is an interface-local multicast address.");
                } else {
                    System.out.println(address + " is an unknown multicast
address type.");
                }
            } else {
                System.out.println(address + " is a unicast address.");
            }
        } catch (UnknownHostException ex) {
            System.err.println("Could not resolve ");
        }
    }
}

```