<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<title>IP Address Classifier</title>

<script>

function classifyIP() {

const ip = document.getElementById("ipInput").value;

const output = document.getElementById("result");

const loopback = /^127\./;

const linkLocal = /^169\.254\./;

const privateA = /^10\./;

const privateB = /^172\.(1[6-9]|2[0-9]|3[0-1])\./;

const privateC = /^192\.168\./;

if (loopback.test(ip)) {

output.innerText = ip + " is a Loopback address.";

} else if (linkLocal.test(ip)) {

output.innerText = ip + " is a Link-local address.";

} else if (privateA.test(ip) || privateB.test(ip) || privateC.test(ip)) {

output.innerText = ip + " is a Private address.";

} else {

output.innerText = ip + " is a Public address.";

}

}

</script>

</head>

<body style="font-family: Arial, sans-serif; text-align: center; margin-top: 50px;">

<h2>IP Address Type Checker</h2>

<input type="text" id="ipInput" placeholder="Enter IP address" style="padding: 8px; width: 250px;">

<button onclick="classifyIP()" style="padding: 8px 16px; margin-left: 10px;">Check</button>

<p id="result" style="margin-top: 20px; font-weight: bold;"></p>

</body>

</html>