**Code**

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| #include <iostream>  #include <string>  using namespace std;  int main() {      string ipAddress;      cout << "Enter an IP address: ";      cin >> ipAddress;      int octet1 = 0, octet2 = 0, octet3 = 0, octet4 = 0;      int octetsParsed = sscanf(ipAddress.c\_str(), "%d.%d.%d.%d", &octet1, &octet2, &octet3, &octet4);      if (octetsParsed != 4 || octet1 < 0 || octet1 > 255 || octet2 < 0 || octet2 > 255 ||          octet3 < 0 || octet3 > 255 || octet4 < 0 || octet4 > 255) {          cout << "Invalid IP address format." << endl;          return 1;      }      if (octet1 >= 1 && octet1 <= 126) {          cout << "Class A IP address." << endl;      } else if (octet1 >= 128 && octet1 <= 191) {          cout << "Class B IP address." << endl;      } else if (octet1 >= 192 && octet1 <= 223) {          cout << "Class C IP address." << endl;      } else if (octet1 >= 224 && octet1 <= 239) {          cout << "Class D IP address (Multicast)." << endl;      } else if (octet1 >= 240 && octet1 <= 255) {          cout << "Class E IP address (Reserved)." << endl;      } else {          cout << "Invalid IP address." << endl;      }  } |

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| **Output:**  Enter an IP address: 192.168.1.1  Class C IP address. |