

```

#include <iostream>
using namespace std;

void printSubnetMask(int prefixLength) {
    int mask[4] = {0, 0, 0, 0};
    for (int i = 0; i < prefixLength; ++i) {
        mask[i / 8] |= (1 << (7 - (i % 8)));
    }
    cout << "Subnet Mask for /" << prefixLength << ": ";
    cout << mask[0] << "." << mask[1] << "." << mask[2] << "." << mask[3] << std::endl;
}

int main() {
    int prefixLength;
    cout << "Enter the prefix length: ";
    cin >> prefixLength;

    if (prefixLength >= 0 && prefixLength <= 32) {
        printSubnetMask(prefixLength);
    }
    else {
        cout << "Invalid prefix length!" << std::endl;
    }
    return 0;
}

```

Output:

Enter the prefix length: 22

Subnet Mask for /22: 255.255.252.0

Enter the prefix length: 0

Subnet Mask for /0: 0.0.0.0

Enter the prefix length: 32

Subnet Mask for /32: 255.255.255.255