# Assignment-B5 (Subnetting and subnet mask) – Output

## # Code

```cpp
#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

```
$ g++ Code-B5.cpp && ./a.out
Enter the prefix length: 32
Subnet Mask for /32: 255.255.255.255
[overnion - Codes (/run/media/overnio
$ g++ Code-B5.cpp && ./a.out
Enter the prefix length: 16
Subnet Mask for /16: 255.255.0.0
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$ g++ Code-B5.cpp && ./a.out
Enter the prefix length: 22
Subnet Mask for /22: 255.255.252.0
```