```
#include <iostream>
using namespace std;
int main() {
   int num, sum;
   sum = 0;

   cout << "Enter a positive integer: ";
   cin >> num;

   for (int i = 1; i <= num; ++i) {
      sum += i;
   }

   cout << "Sum = " << sum << endl;
   return 0;
}</pre>
```