

```

1  #include <iostream>
2  using namespace std;
3  bool checkPrime(int n);
4  int main()
5  {
6      int n, i;
7      bool flag = false;
8      cout << "Enter a positive integer: ";
9      cin >> n;
10     for(i = 2; i <= n/2; ++i) {
11         if (checkPrime(i)) {
12             if (checkPrime(n - i)) {
13                 cout << n << " = " << i << " + " << n-i << endl;
14                 flag = true;
15             }
16         }
17     }
18     if (!flag)
19         cout << n << " can't be expressed as sum of two prime numbers.";
20     return 0;
21 }
22 // Check prime number
23 bool checkPrime(int n) {
24     int i;
25     bool isPrime = true;
26     // 0 and 1 are not prime numbers
27     if (n == 0 || n == 1) {
28         isPrime = false;
29     }
30     else
31     {
32         for(i = 2; i <= n/2; ++i) {
33             if(n % i == 0) {
34                 isPrime = false;
35                 break;
36             }
37         }
38     }
39     return isPrime;
40 }
41

```

C:\Users\ASUS\Documents\sum of primes.exe

Enter a positive integer: 34

34 = 3 + 31

34 = 5 + 29

34 = 11 + 23

34 = 17 + 17

Process exited after 5.159 seconds with return value 0

Press any key to continue . . . ■