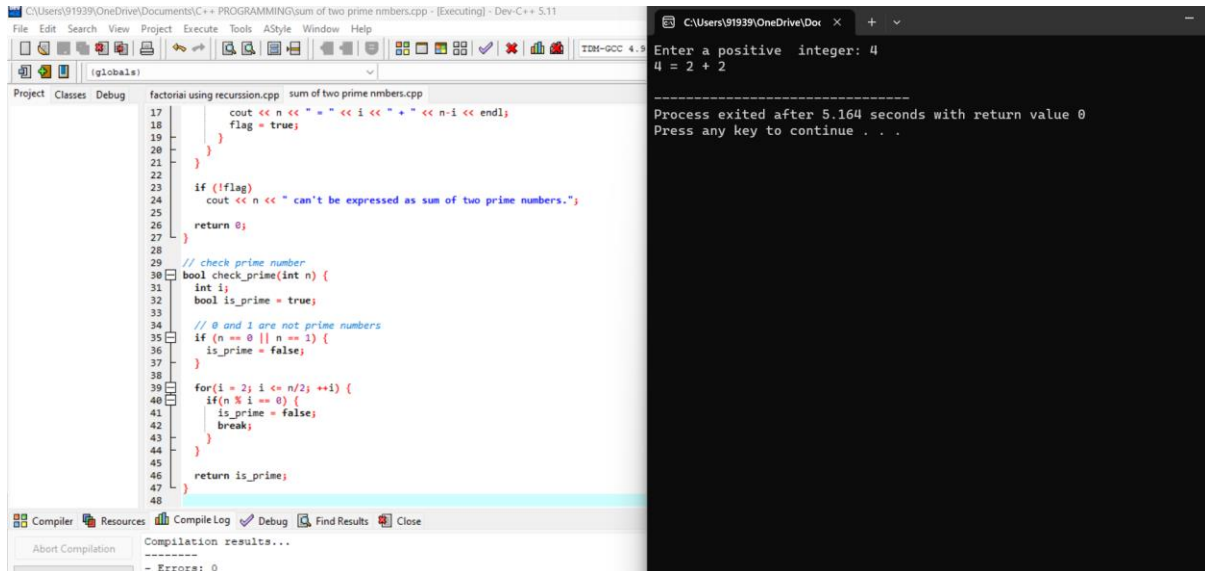


# ASSIGNMENT 3

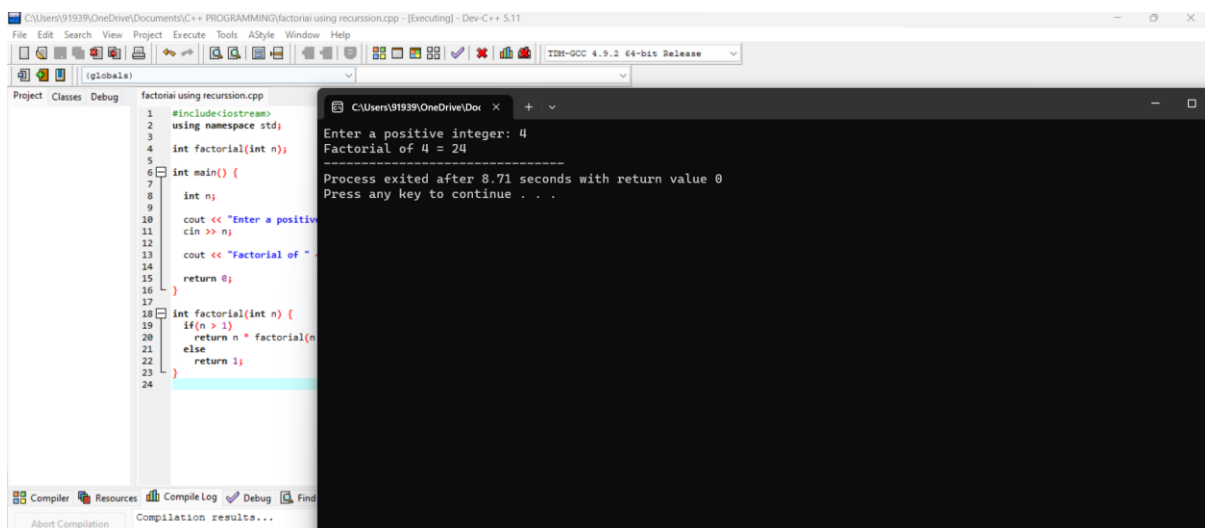
C++ Program to Check Whether a Number can be Express as Sum of Two Prime Numbers



```
17      cout << n << " = " << i << " + " << n-i << endl;
18      flag = true;
19    }
20  }
21  }
22  }
23  if (!flag)
24    cout << n << " can't be expressed as sum of two prime numbers.";
25  return 0;
26  }
27  }
28  }
29  // check prime number
30  bool check_prime(int n) {
31    int i;
32    bool is_prime = true;
33    // 0 and 1 are not prime numbers
34    if (n == 0 || n == 1) {
35      is_prime = false;
36    }
37    for(i = 2; i <= n/2; ++i) {
38      if(n % i == 0) {
39        is_prime = false;
40        break;
41      }
42    }
43    return is_prime;
44  }
45  }
46  }
47  }
```

Enter a positive integer: 4  
4 = 2 + 2  
-----  
Process exited after 5.164 seconds with return value 0  
Press any key to continue . . .

C++ program to Calculate Factorial of a Number Using Recursion



```
1  #include<iostream>
2  using namespace std;
3
4  int factorial(int n);
5
6  int main() {
7    int n;
8
9    cout << "Enter a positive integer: ";
10   cin >> n;
11
12   cout << "Factorial of " << n << " is: ";
13   return 0;
14 }
15
16
17
18 int factorial(int n) {
19   if(n > 1)
20     return n * factorial(n-1);
21   else
22     return 1;
23 }
24 }
```

Enter a positive integer: 4  
Factorial of 4 = 24  
-----  
Process exited after 8.71 seconds with return value 0  
Press any key to continue . . .

## C++ Program to Add Two Matrix Using Multi-dimensional Arrays

```
Enter element a23 : 5
Enter element a24 : 1
Enter element a31 : 2
Enter element a32 : 3
Enter element a33 : 4
Enter element a34 : 5
Enter element a41 : 5
Enter element a42 : 6
Enter element a43 : 6
Enter element a44 : 5

Enter elements of 2nd matrix:
Enter element b11 : 1
Enter element b12 : 2
Enter element b13 : 3
Enter element b14 : 1
Enter element b21 : 2
Enter element b22 : 1
Enter element b23 : 3
Enter element b24 : 4
Enter element b31 : 5
Enter element b32 : 5
Enter element b33 : 5
Enter element b34 : 5
Enter element b41 : 5
Enter element b42 : 53
Enter element b43 : 3
Enter element b44 : 32

Sum of two matrix is:
3 5 8 5
4 4 8 5
7 8 9 10
10 59 9 37

-----
Process exited after 56.77 seconds with return value 0
Press any key to continue . . .
```