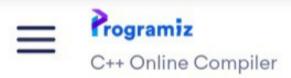




#### Output



```
#include <iostream>
 1
    using namespace std;
 2
 3
 4
    int main()
 5 + {
        int a = 5, b = 10, temp;
 6
 7
        cout << "Before swapping." << endl;</pre>
 8
        cout << "a = " << a << ", b = " << b
 9
             << endl;
10
11
        temp = a;
        a = b;
12
13
        b = temp;
14
        cout << "\nAfter swapping." << endl;</pre>
15
        cout << "a = " << a << ", b = " << b
16
             << endl;
17
18
        return 0;
19
    }
```



Learn Python



main.cpp

Output



## /tmp/vbc8pHNsvD.o

Before swapping.

$$a = 5, b = 10$$

After swapping.

$$a = 10, b = 5$$

```
main.cpp Output

1 #include <iostream>
```

```
2 using namespace std;
 3
 4 - int main() {
        float n1, n2, n3;
 5
 6
 7
        cout << "Enter three numbers: ";</pre>
        cin >> n1 >> n2 >> n3;
 8
 9
10
        if(n1 >= n2 \&\& n1 >= n3)
        cout << "Largest number: " << n1;</pre>
11
12
13
        if(n2 >= n1 \&\& n2 >= n3)
        cout << "Largest number: " << n2;</pre>
14
15
16
        if(n3 >= n1 \&\& n3 >= n2)
        cout << "Largest number: " << n3;</pre>
17
18
19
        return 0;
    }
20
```

Run



Output



## /tmp/1q0NIgdfX0.o

Enter three numbers: 2.3

8.3

2.7

Largest number: 8.3

```
main.cpp
                            Output
    #include <iostream>
    using namespace std;
 2
 3
 4 - int main() {
 5
         int year;
 6
 7
         cout << "Enter a year: ";</pre>
 8
         cin >> year;
 9
10 -
         if (year \% 4 == 0) {
11 +
             if (year \% 100 == 0) {
                  if (year \% 400 == 0)
12
                      cout << year << " is a
13
                           leap year.";
                  else
14
                      cout << year << " is not a
15
                           leap year.";
16
             }
17
             else
18
                 cout << year << " is a leap</pre>
                      year.";
19
         }
        else
20
21
             cout << year << " is not a leap</pre>
                 year.";
22
         return 0;
23
24
    }
```

Run



Output

6

# /tmp/1q0NIgdfX0.o

Enter a year: 2017

2017 is not a leap year.





Output



```
1
   #include<iostream>
 2
 3 using namespace std;
    int main()
 4
 5 + {
 6
    int sum = 0, n;
   int a = 0;
 7
   int b = 1;
 8
   cout << "Enter the nth value: ";
 9
10 cin >> n;
11 cout << "Fibonacci series: ";
12 while(sum <= n)</pre>
13 - {
14 cout << sum << " ";
   a = b; // swap elements
15
    b = sum;
16
17
    sum = a + b; // next term is the sum of
        the last two terms
18
    }
   return 0;
19
20
   }
21
```





Output



#### /tmp/DgFtXXIQeM.o

Enter the nth value: 1000

Fibonacci series: 0 1 1 2 3 5 8 13 21 34 55 89

144 233 377 610 987

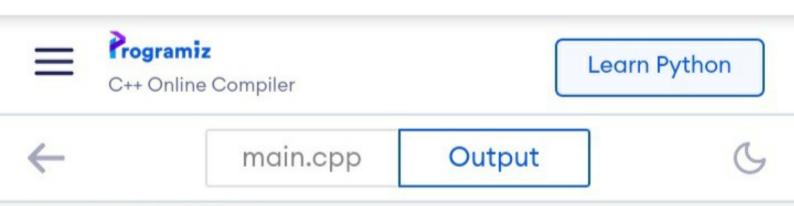




Output



```
#include <iostream>
 1
    using namespace std;
 3
 4 - int main() {
 5
        int i, n;
        bool isPrime = true;
 6
 7
        cout << "Enter a positive integer: ";</pre>
 8
 9
         cin >> n;
10
11
        // 0 and 1 are not prime numbers
        if (n == 0 || n == 1) {
12 -
             isPrime = false;
13
14
         }
15 -
        else {
             for (i = 2; i \le n / 2; ++i) {
16 -
17 -
                 if (n \% i == 0) {
18
                      isPrime = false;
                      break;
19
20
                 }
21
             }
22
         }
        if (isPrime)
23
             cout << n << " is a prime number";</pre>
24
25
         else
26
             cout << n << " is not a prime
                 number";
27
        return 0;
28
    }
29
                                           Run
```



### /tmp/GlIO6GkM2T.o

Enter a positive integer: 30 30 is not a prime number