

Example

```
1 // condition variable example
 2 #include <iostream>
                        // std::cout
 3 #include <thread>
                             // std::thread
 4 #include <mutex>
                              // std::mutex, std::unique lock
 5 #include <condition variable> // std::condition variable
 7 std::mutex mtx;
 8 std::condition variable cv;
 9 bool ready = false;
10
11 void print_id (int id) {
12 std::unique_lock<std::mutex> lck(mtx);
    while (!ready) cv.wait(lck);
14 // ...
15 std::cout << "thread " << id << '\n';
16 }
17
18 void go() {
    std::unique lock<std::mutex> lck(mtx);
20 ready = true;
21
    cv.notify all();
22 }
23
24 int main ()
25 {
std::thread threads[10];
27 // spawn 10 threads:
28
    for (int i=0; i<10; ++i)
29
     threads[i] = std::thread(print_id,i);
30
31
    std::cout << "10 threads ready to race...\n";</pre>
32
    go();
                               // go!
33
34
    for (auto& th : threads) th.join();
35
36
    return 0;
37 }
```

Possible output (thread order may vary):

10 threads ready to race... thread 2

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