

```

1  #include <iostream>
2  #include <thread>
3
4  void f1() { std::cout << "Hello from f1" << std::endl; }
5  void f2(int a, int b) {
6      std::cout << "f2 invoked with " << a << ", " << b << std::endl;
7  }
8
9  int main() {
10     std::thread t1(f1);
11     t1.join();
12     std::thread t2(f2, 1, 2);
13     t2.join();
14     std::thread t3(f2, 5, 7);
15     t3.join();
16     int i = 7;
17     std::thread t4([&]() {
18         std::cout << "lambda invoked with captured i == " << i << std::endl;
19     });
20     t4.join();
21     std::thread t5(
22         [&](int a) {
23             std::cout << "lambda invoked with captured i == " << i
24                 << " and a == " << a << std::endl;
25         },
26         1024);
27     t5.join();
28     auto f = [&](int k) {
29         f1();
30         f2(i, i * k);
31     };
32     std::thread t6(f, 99);
33     t6.join();
34 }

```

FIGURE A.7 Examples of creating and joining threads in C++.