


```
std::atomic<int> ay{0};
```

```
int x = 0;
```

```
void atomic_read_barrier()
```

```
{
```

```
    std::cout << "y = " << ay.load() << std::endl;
```

```
    std::cout << "x = " << x << std::endl;
```

```
    std::cout << std::endl;
```

```
}
```

```
void atomic_write_barrier()
```

```
{
```

```
    x = 42;
```

```
    ay.store(20);
```

```
}
```

```
std::thread t2(atomic_read_barrier);
```

```
std::thread t1(atomic_write_barrier);
```

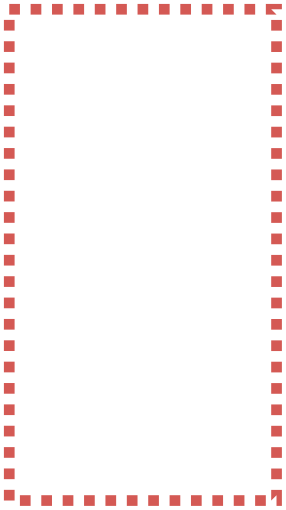
```
t1.join();
```

```
t2.join();
```










```
std::atomic<int> ay{0};  
int x = 0;
```

```
void atomic_read_barrier()  
{  
→   std::cout << "y = " << ay.load() << std::endl;  
   std::cout << "x = " << x << std::endl;  
   std::cout << std::endl;  
}
```

```
void atomic_write_barrier()  
{  
→   x = 42;  
   ay.store(20);  
}
```

```
→ std::thread t2(atomic_read_barrier);  
std::thread t1(atomic_write_barrier);  
t1.join();  
t2.join();
```

x	y
0	0
42	0
42	20

```
void th_read_lock()
{
    lock lk{m};

    std::cout << "x = " << x << std::endl;
    std::cout << "y = " << y << std::endl;
    std::cout << std::endl;
}
void th_write_lock()
{
    lock lk{m};
    x = 42;
    y = 20;
}
```

```
std::thread t2(th_read_lock);
std::thread t1(th_write_lock);
t1.join();
t2.join();
```