## Same example in Rust (with borrows)

```
use std::sync::Mutex;
use std::thread;
fn entry_point(data: &Mutex<String>, thread_id: i32) {
    let mut guard = data.lock().unwrap();
    guard.push str("\(\beta\)");
    println!("Thread {}: {}", thread_id, *guard);
pub fn main() {
   let shared data = Mutex::new(String::from("Hello threads"));
    const NUM THREADS: i32 = 15;
    // Use scope to ensure threads don't outlive our data
    thread::scope(|scope| {
        let mut threads = Vec::new();
        for i in 0..NUM THREADS {
            let local_data = &shared_data;
            let handle = scope.spawn(move | | {
                entry_point(local_data, i);
            });
            threads.push(handle);
        for handle in threads {
            handle.join().unwrap();
    });
```

Key changes made in this version:

- Removed Arc and now using direct references (&Mutex<String>)
- 2. Added thread::scope to ensure threads don't outlive the borrowed data
- 3. Changed the thread spawning to use scoped threads via scope spawn
- 4. Simplified the function signature of entry\_point to take a reference
- 5. No more need for explicit cloning since we're using references

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This version has several advantages:

- More efficient (no atomic reference counting)
- Cleaner code (no clone operations)
- Compile-time guarantees about data lifetime
- Still maintains thread safety through the Mutex