

A borrow of a constant containing interior mutability was attempted.

Erroneous code example:

```
use std::sync::atomic::AtomicUsize;

const A: AtomicUsize = AtomicUsize::new(0);
const B: &'static AtomicUsize = &A;
// error: cannot borrow a constant which may contain interior mutability,
//         create a static instead
```

A `const` represents a constant value that should never change. If one takes a `&` reference to the constant, then one is taking a pointer to some memory location containing the value. Normally this is perfectly fine: most values can't be changed via a shared `&` pointer, but interior mutability would allow it. That is, a constant value could be mutated. On the other hand, a `static` is explicitly a single memory location, which can be mutated at will.

So, in order to solve this error, use statics which are `Sync` :

```
use std::sync::atomic::AtomicUsize;

static A: AtomicUsize = AtomicUsize::new(0);
static B: &'static AtomicUsize = &A; // ok!
```

You can also have this error while using a cell type:

```
use std::cell::Cell;

const A: Cell<usize> = Cell::new(1);
const B: &Cell<usize> = &A;
// error: cannot borrow a constant which may contain interior mutability,
//         create a static instead

// or:
struct C { a: Cell<usize> }

const D: C = C { a: Cell::new(1) };
const E: &Cell<usize> = &D.a; // error

// or:
const F: &C = &D; // error
```

This is because cell types do operations that are not thread-safe. Due to this, they don't implement `Sync` and thus can't be placed in statics.

However, if you still wish to use these types, you can achieve this by an unsafe wrapper:

```
use std::cell::Cell;
use std::marker::Sync;

struct NotThreadSafe<T> {
    value: Cell<T>,
```

```
}  
  
unsafe impl<T> Sync for NotThreadSafe<T> {}  
  
static A: NotThreadSafe<usize> = NotThreadSafe { value : Cell::new(1) };  
static B: &'static NotThreadSafe<usize> = &A; // ok!
```

Remember this solution is unsafe! You will have to ensure that accesses to the cell are synchronized.