Why do {} while(0)?

```
#ifdef DEBUG
#define DEBUG_PRINT(...) fprintf(...)
#else
#define DEBUG_PRINT(...) /* Don't do anything in release builds
*/
#endif
#ifdef DEBUG
#define DEBUG_PRINT(...) do{ fprintf( ... ); } while( 0 )
#else
#define DEBUG PRINT(...)
#endif
```

```
#ifdef LOCKING
#define foo(x) lock(x); f(x)
#else
#define foo(x)/* Do nothing*/
#endif
```

```
If (c)
foo(x);
else
g(x);
g(x);
g(x);
g(x);
```

```
#ifdef LOCKING
#define foo(x) do {lock(x); f(x); } while(0)
#else
#define foo(x)/* Do nothing*/
#endif
```

```
If (c)
foo(x);
else
g(x);
g(x);
If (c)
do \{lock(x); f(x);\} \text{ while}(0);
else
```