Debug

* - no optimizations on your code
- variables set to sensible values (mem cleared, ints =0, etc)
- slow
- larger executable
- debug symbols (variable names)

Release

- many compiler optimizations on your code (so stepping through may not be easy)
- variables not initialized
- fast
- smaller executable
- difficult to reverse engineer

```
int K = 0;
int myint = 1;
while (true) {         ← while (myint == 1) {

                            ⋮

}                      }
```

will be in machine
code