Leaky Operators in Languages (LOL)
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Motivation

Program behaviors can **leak** sensitive information.

```c
if(secret && flag)
do_something()
```

Writing **sensitive** applications is notoriously **difficult**.

**LOL is no laughing matter.**

Language-based Vulnerabilities

Originates from **subtle control dependencies** introduced by the semantics of operators in imperative languages.

Evaluation and Future Work

More Applications

User Studies

Bug-fix reports

Dynamic Instruction Count Relative to Baseline

RNG Seed Values

- **DO_leaky**
- **DO_fixed_using_cmovs**