

```
C' ≡ X1 := X2 + X3;  
      X1 := X1 + X1
```

```
// X1' ≤ 2·X2 + 2·X3  
// X2' ≤ X2  
// X3' ≤ X3
```

```
C'' ≡ X1 := 1;  
      loop X2 { X1 := X1 + X1 }
```

```
// X1' ≤ 2^X2  
// X2' ≤ X2
```

“A flow calculus of **mwp**-bounds for
complexity analysis”

syntactic
sound

theoretical
nondeterministic

- ✓ Improvement and Implementation
- ✓ pymwp: static analyzer
- certified complexity