

Stencil Code – My Toy Example

1. Naive

```
for k
  a(k) := b(k) + c(k)
end
...

for k
  d(k) := a(k-1)*e(-1) +
          a(k)*e(0) +
          a(k+1)*e(+1)
end
...

for k
  f(k) := a(k)*g(k) + d(k)
end
```

5. Pre-calculation with stages & column Buffer

Stencil

Stage 1

a := b + c

Stage 2

d := a*e (k:-1,0,1)

Stage 3

f := a*g + d

Apply Stencil