1

```
 1: procedure GLOBALKERNEL
 2:     tid ← GLOBALTHREADID
 3:     a ← FIRSTINDEX(tid)
 4:     b ← SECONDINDEX(tid)
 5:     GLOBALMEM(a, b) ← BUTTERFLY(a, b)
 6: end procedure
```

1

```
 1: procedure LOCALKERNEL
 2:     tid ← GLOBALTHREADID
 3:     a ← FIRSTGLOBALINDEX(tid)
 4:     b ← SECONDGLOBALINDEX(tid)
 5:     c ← FIRSTLOCALINDEX(tid)
 6:     d ← SECONDLOCALINDEX(tid)
 7:     SHAREDMEM(c, d) ← GLOBALMEM(a, b)
 8:     in1 ← 1
 9:     in1 ← in1 for stage ← 0, stages − 1 do
10:
        end
        SHAREDMEM(c, d) ← BUTTERFLY(a, b)
11:
12:     OUTPUT(a, b) ← SHAREDMEM(c, b)
13: end procedure
```