Code

```
while j < 100:
    j += 1
    if a is None:
        break
    a = a.f()
```

```
n = self.value >> 2
if n == 1:
    return None
return self.build(n)
```

```
if n & 1 == 0:
    return Even(n)
else:
    return Odd(n)
```

```
self.value = n
```

Frames

a = a_1
j = j_2

n = i_2
self = a_1

n = i_2

self = a_2

Trace

$[j_1, \ a_1]$
j_2 = int_add(j_1, 1)
guard_nonnull(a_1)
guard_class(a_1, Even)
i_1 = getfield_gc(a_1, descr='value')
i_2 = int_rshift(i_1, 2)
b_1 = int_eq(i_2, 1)
guard_false(b_1)
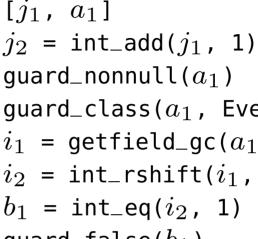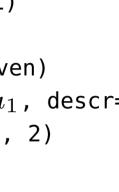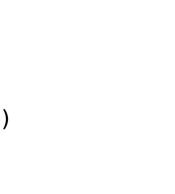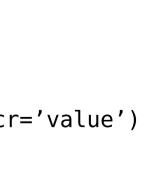i_3 = int_and(i_2, 1)
i_4 = int_is_zero(i_3)
guard_true(i_4)
a_2 = new(Even)
setfield_gc(a_2, descr='value')