

# Code

```
while j < 100:
```

```
    j += 1
```

```
    if a is None:
```

```
        break
```

```
    a = a.f()
```

# Frames

```
a =  $a_1$ 
```

```
j =  $j_2$ 
```

# Trace

```
[ $j_1$ ,  $a_1$ ]
```

```
 $j_2$  = int_add( $j_1$ , 1)
```

```
guard_nonnull( $a_1$ )
```