while loop

example 1

```
# basic example
reps = 5
i = 1
while i <= reps:
    print(i)
    i += 1</pre>
```

```
# basic example
reps = 5
i = 1
while i <= reps:
    print(i)
    i += 1</pre>
```

reps = 5

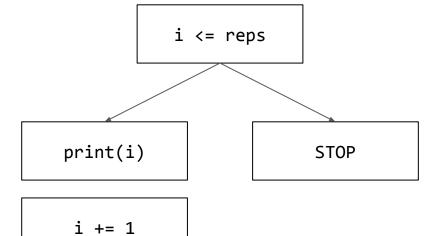
Loop

```
# basic example
reps = 5
i = 1
while i <= reps:
    print(i)
    i += 1</pre>
```

$$reps = 5$$

$$i = 1$$

Loop

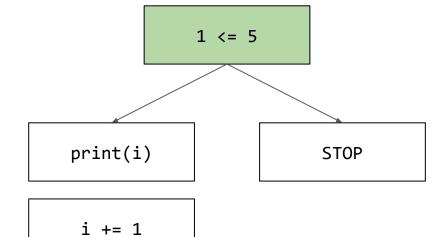


```
# basic example
reps = 5
i = 1
while i <= reps:
    print(i)
    i += 1</pre>
```

$$reps = 5$$

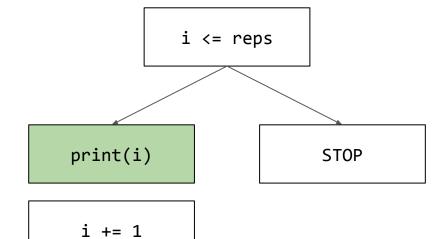
$$i = 1$$

Loop



```
# basic example
reps = 5
i = 1
while i <= reps:
    print(i)
    i += 1</pre>
```

Loop

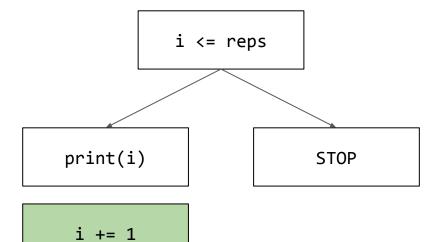


Output

```
# basic example
reps = 5
i = 1
while i <= reps:
    print(i)
    i += 1</pre>
```

$$reps = 5$$

Loop



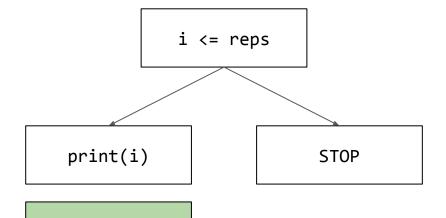
Output

```
# basic example
reps = 5
i = 1
while i <= reps:
    print(i)
    i += 1</pre>
```

$$reps = 5$$

$$i = 2$$

Loop



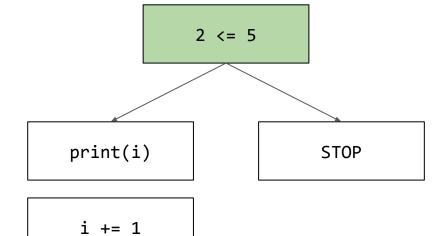
i += 1

Output

```
# basic example
reps = 5
i = 1
while i <= reps:
    print(i)
    i += 1</pre>
```

$$i = 2$$

Loop



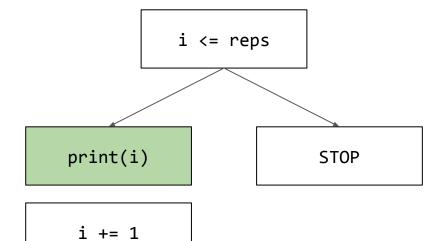
Output

```
# basic example
reps = 5
i = 1
while i <= reps:
    print(i)
    i += 1</pre>
```

$$reps = 5$$

$$i = 2$$

Loop

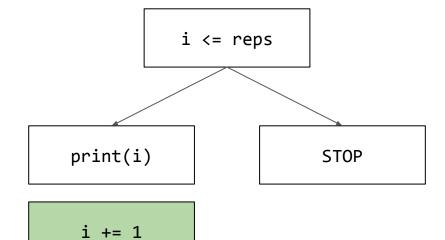


```
# basic example
reps = 5
i = 1
while i <= reps:
    print(i)
    i += 1</pre>
```

$$reps = 5$$

$$i = 2$$

Loop

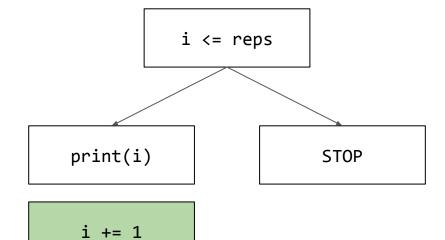


```
# basic example
reps = 5
i = 1
while i <= reps:
    print(i)
    i += 1</pre>
```

$$reps = 5$$

$$i = 3$$

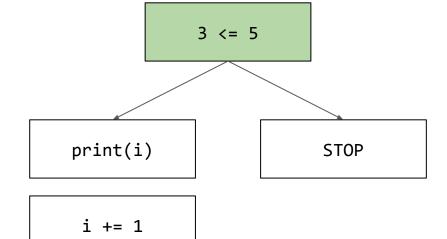
Loop



```
# basic example
reps = 5
i = 1
while i <= reps:
    print(i)
    i += 1</pre>
```

$$i = 3$$

Loop

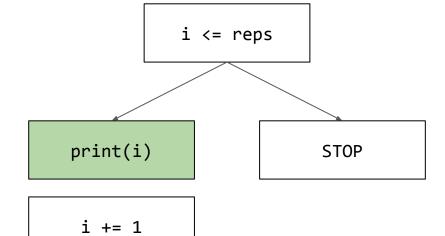


```
# basic example
reps = 5
i = 1
while i <= reps:
    print(i)
    i += 1</pre>
```

$$reps = 5$$

$$i = 3$$

Loop



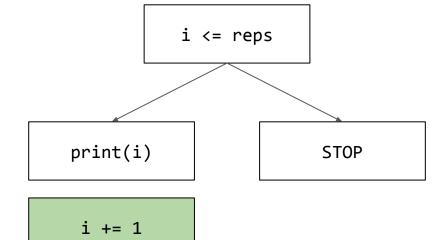
- > 1> 2
- > 3

```
# basic example
reps = 5
i = 1
while i <= reps:
    print(i)
    i += 1</pre>
```

$$reps = 5$$

$$i = 3$$

Loop

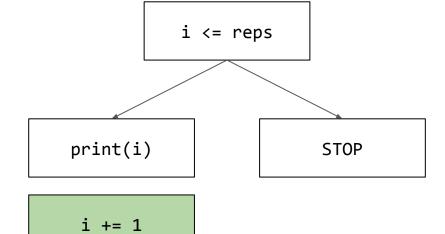


```
# basic example
reps = 5
i = 1
while i <= reps:
    print(i)
    i += 1</pre>
```

$$reps = 5$$

$$i = 4$$

Loop

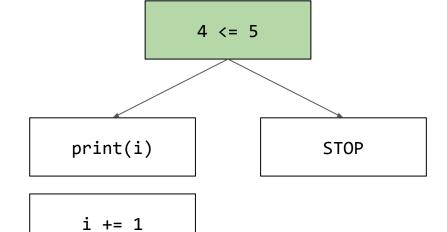


```
# basic example
reps = 5
i = 1
while i <= reps:
    print(i)
    i += 1</pre>
```

$$reps = 5$$

$$i = 4$$

Loop



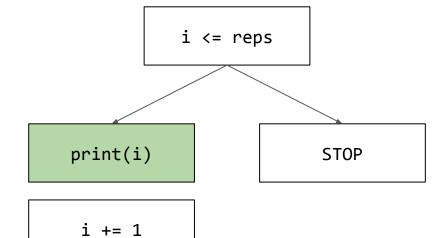
- > 1 > 2
- > 3

```
# basic example
reps = 5
i = 1
while i <= reps:
    print(i)
    i += 1</pre>
```

$$reps = 5$$

$$i = 4$$

Loop



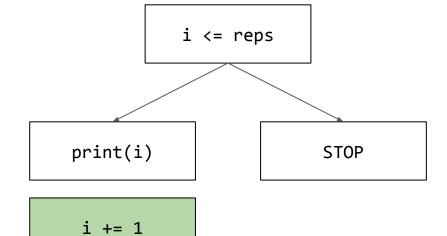
- > 1> 2> 3
- > 4

```
# basic example
reps = 5
i = 1
while i <= reps:
    print(i)
    i += 1</pre>
```

$$reps = 5$$

$$i = 4$$

Loop



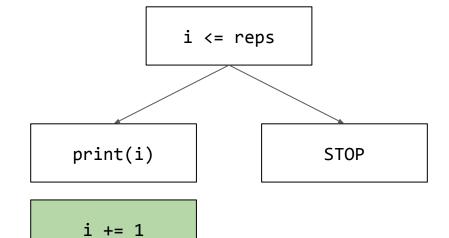
```
> 1> 2> 3> 4
```

```
# basic example
reps = 5
i = 1
while i <= reps:
    print(i)
    i += 1</pre>
```

$$reps = 5$$

$$i = 5$$

Loop



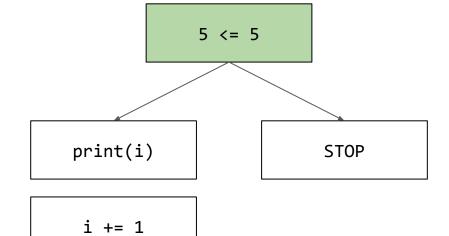
- 123
- > 4

```
# basic example
reps = 5
i = 1
while i <= reps:
    print(i)
    i += 1</pre>
```

$$reps = 5$$

$$i = 5$$

Loop



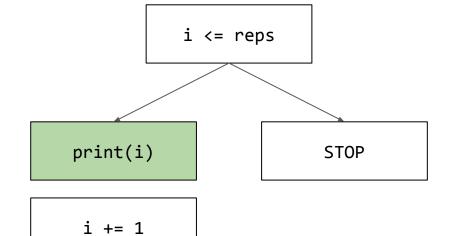
- > 1> 2> 3
- > 4

```
# basic example
reps = 5
i = 1
while i <= reps:
    print(i)
    i += 1</pre>
```

$$reps = 5$$

$$i = 5$$

Loop

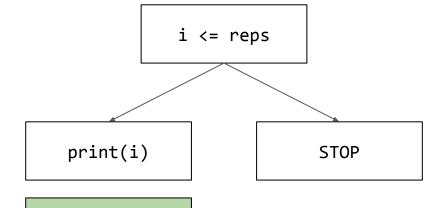


- > 1> 2> 3> 4
- `

```
reps = 5
i = 1
while i <= reps:
    print(i)
    i += 1
```

$$reps = 5$$

$$i = 5$$



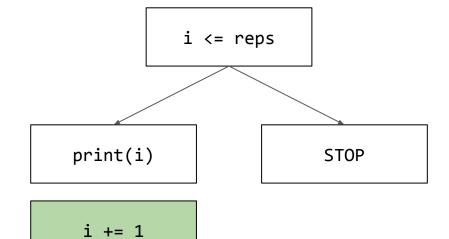
i += 1

- > 1 > 4
- > 5

```
reps = 5
i = 1
while i <= reps:
    print(i)
    i += 1
```

$$reps = 5$$

$$i = 6$$



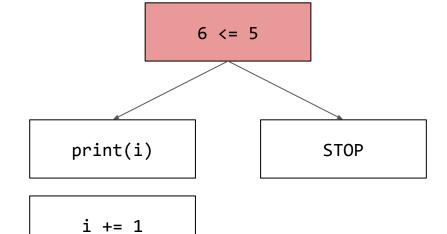
- > 1 > 4
- > 5

```
# basic example
reps = 5
i = 1
while i <= reps:
    print(i)
    i += 1</pre>
```

$$reps = 5$$

$$i = 6$$

Loop



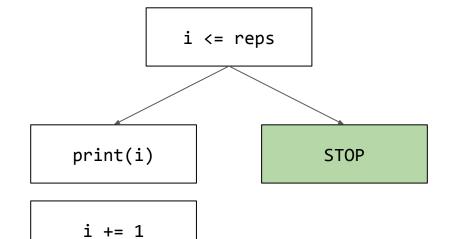
```
> 1> 2> 3> 4> 5
```

```
# basic example
reps = 5
i = 1
while i <= reps:
    print(i)
    i += 1</pre>
```

$$reps = 5$$

$$i = 6$$

Loop



- > 1> 2> 3> 4
- > 5

example 2

```
# break example
reps = 5
i = 1
while i <= reps:
    if i == 3:
        break
    print(i)
    i += 1</pre>
```

reps = 5

$$i = 1$$

Loop

```
# break example
reps = 5
i = 1
while i <= reps:
    if i == 3:
        break
    print(i)
    i += 1</pre>
```

$$i = 1$$

Loop

i <= reps

STOP

STOP

break

print(i)

```
# break example
reps = 5
i = 1
while i <= reps:
    if i == 3:
        break
    print(i)
    i += 1</pre>
```

reps = 5

$$i = 1$$

1 <= 5 i == 3

STOP

break

pr inc(1)

Output

STOP

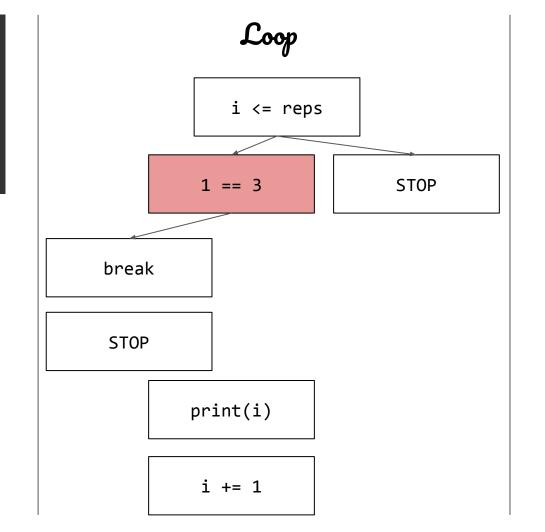
print(i)

i += 1

```
# break example
reps = 5
i = 1
while i <= reps:
    if i == 3:
        break
    print(i)
    i += 1</pre>
```

reps = 5

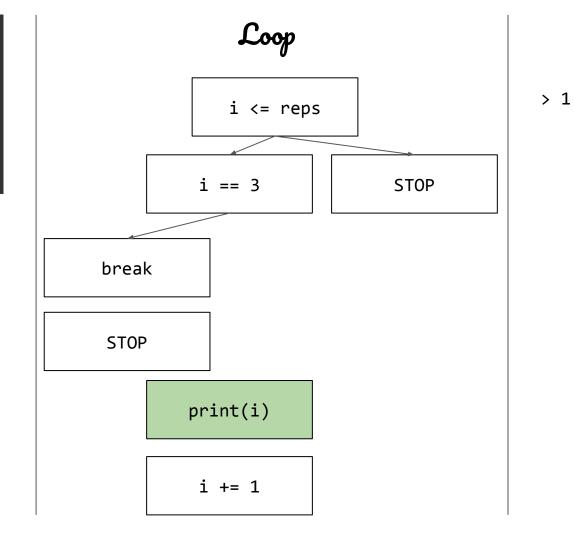
$$i = 1$$



```
# break example
reps = 5
i = 1
while i <= reps:
    if i == 3:
        break
    print(i)
    i += 1</pre>
```

reps = 5

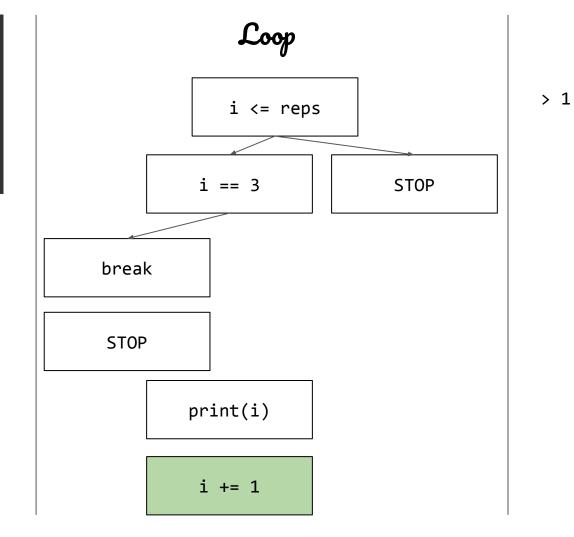
$$i = 1$$



```
# break example
reps = 5
i = 1
while i <= reps:
    if i == 3:
        break
    print(i)
    i += 1</pre>
```

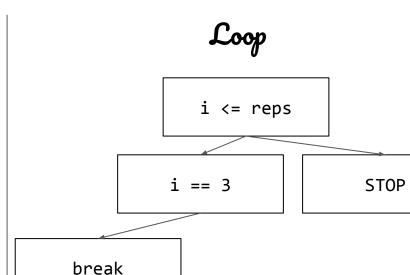
reps = 5

$$i = 1$$



```
# break example
reps = 5
i = 1
while i <= reps:
    if i == 3:
        break
    print(i)
    i += 1</pre>
```

$$i = 2$$



STOP

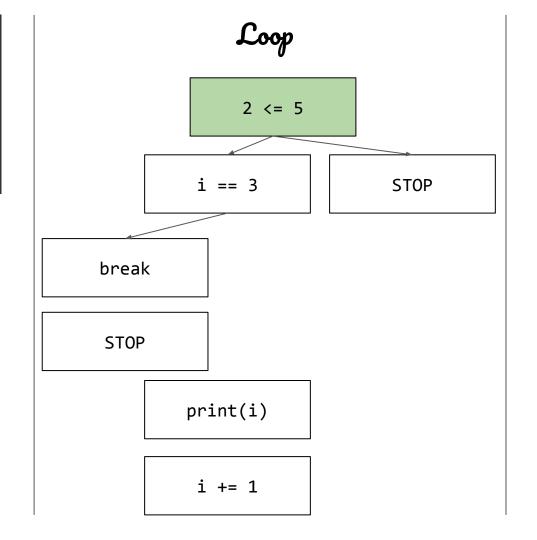
print(i)

Output

```
# break example
reps = 5
i = 1
while i <= reps:
    if i == 3:
        break
    print(i)
    i += 1</pre>
```

reps = 5

$$i = 2$$

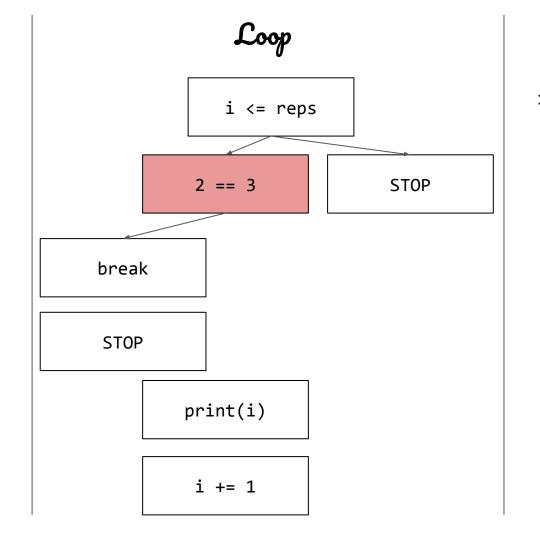


Output

```
# break example
reps = 5
i = 1
while i <= reps:
    if i == 3:
        break
    print(i)
    i += 1</pre>
```

reps = 5

$$i = 2$$

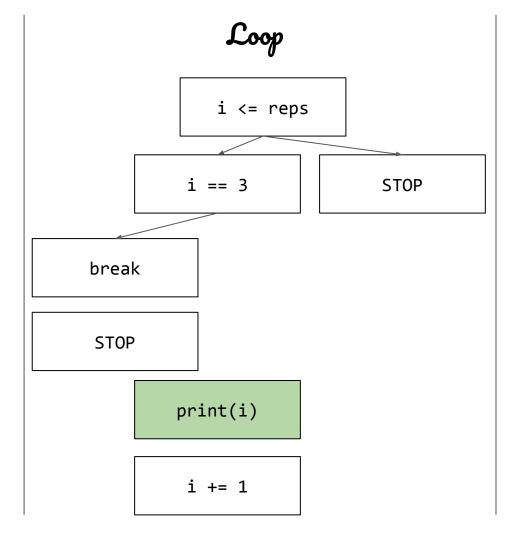


Output

```
# break example
reps = 5
i = 1
while i <= reps:
    if i == 3:
        break
    print(i)
    i += 1</pre>
```

reps = 5

$$i = 2$$

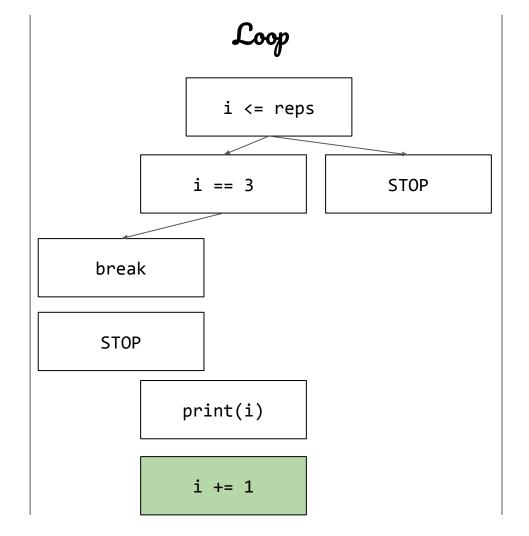


Output

```
# break example
reps = 5
i = 1
while i <= reps:
    if i == 3:
        break
    print(i)
    i += 1</pre>
```

reps = 5

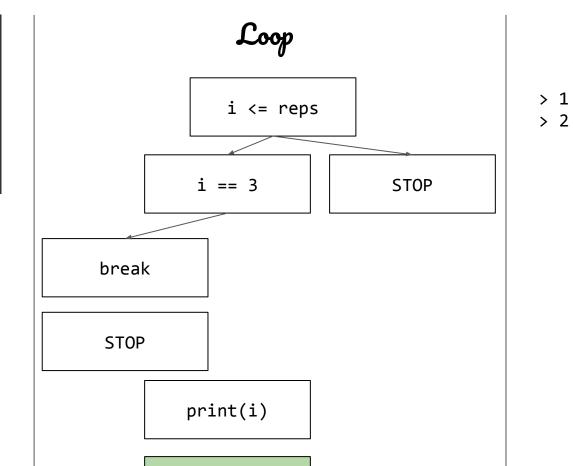
$$i = 2$$



Output

```
# break example
reps = 5
i = 1
while i <= reps:
    if i == 3:
        break
    print(i)
    i += 1</pre>
```

$$i = 3$$

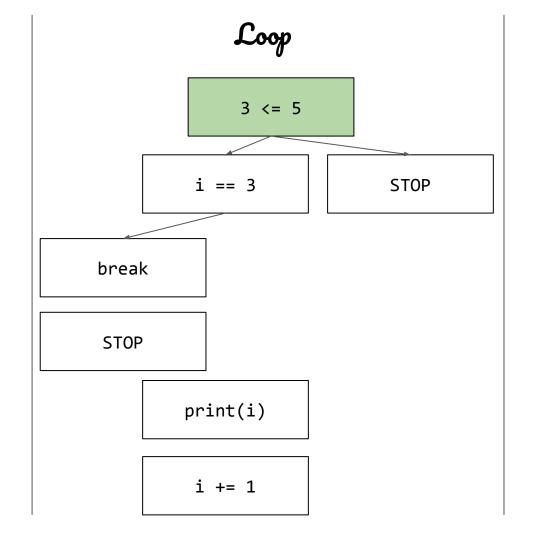


i += 1

```
# break example
reps = 5
i = 1
while i <= reps:
    if i == 3:
        break
    print(i)
    i += 1</pre>
```

reps = 5

$$i = 3$$

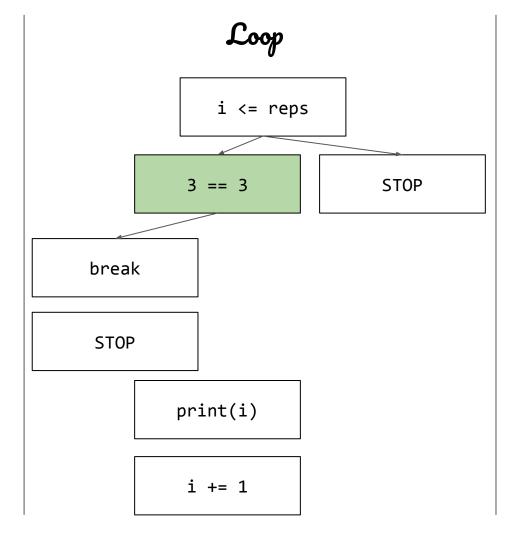


Output

```
# break example
reps = 5
i = 1
while i <= reps:
    if i == 3:
        break
    print(i)
    i += 1</pre>
```

reps = 5

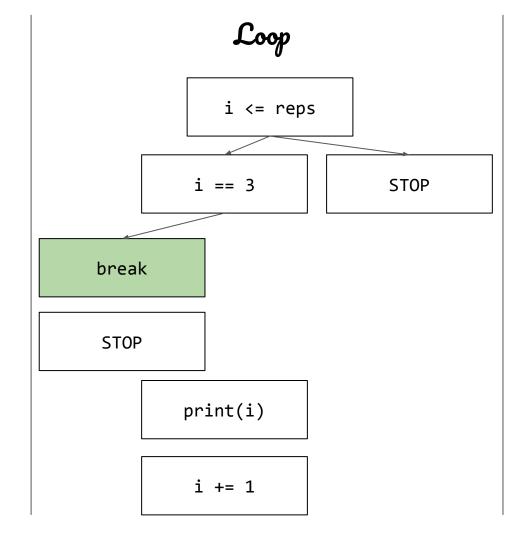
$$i = 3$$



```
# break example
reps = 5
i = 1
while i <= reps:
    if i == 3:
        break
    print(i)
    i += 1</pre>
```

reps = 5

$$i = 3$$



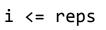
Output

```
# break example
reps = 5
i = 1
while i <= reps:
    if i == 3:
        break
    print(i)
    i += 1</pre>
```

reps = 5

$$i = 3$$

Loop





STOP

break

STOP

print(i)

example 3

```
# continue example
reps = 5
i = 1
while i <= n_reps:
    i += 1
    if i == 3:
        continue
    print(i)</pre>
```

reps = 5

$$i = 1$$

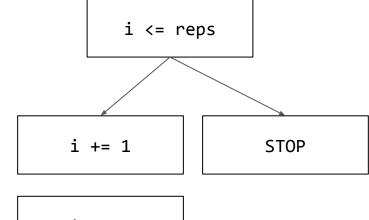
Loop

```
# continue example
reps = 5
i = 1
while i <= n_reps:
    i += 1
    if i == 3:
        continue
    print(i)</pre>
```

$$reps = 5$$

$$i = 1$$

Loop



continue

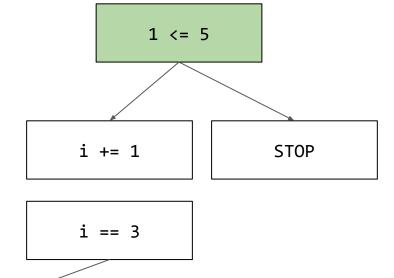
print(i)

```
# continue example
reps = 5
i = 1
while i <= n_reps:
    i += 1
    if i == 3:
        continue
    print(i)</pre>
```

$$reps = 5$$

$$i = 1$$

Loop



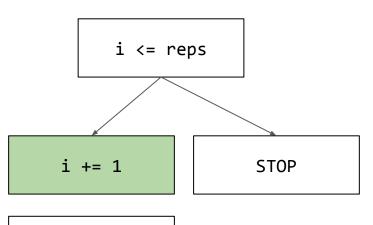
print(i)

continue

```
# continue example
reps = 5
i = 1
while i <= n_reps:
    i += 1
    if i == 3:
        continue
    print(i)</pre>
```

$$i = 1$$

Loop



$$i == 3$$

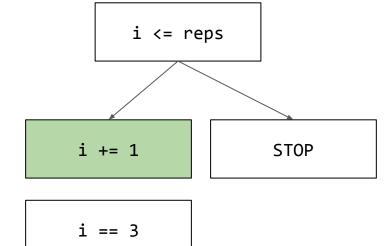
continue

print(i)

```
# continue example
reps = 5
i = 1
while i <= n_reps:
    i += 1
    if i == 3:
        continue
    print(i)</pre>
```

$$i = 2$$

Loop



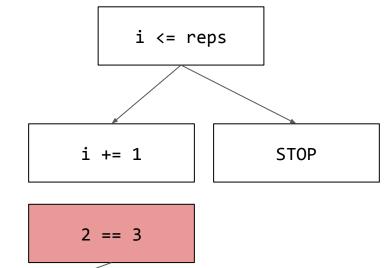
continue

print(i)

```
# continue example
reps = 5
i = 1
while i <= n_reps:
    i += 1
    if i == 3:
        continue
    print(i)</pre>
```

$$i = 2$$

Loop



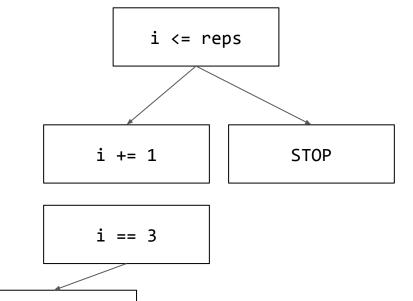
continue

print(i)

```
# continue example
reps = 5
i = 1
while i <= n_reps:
    i += 1
    if i == 3:
        continue
    print(i)</pre>
```

$$i = 2$$

Loop



print(i)

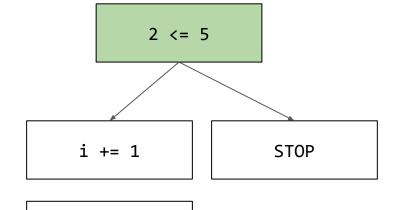
continue

Output

```
# continue example
reps = 5
i = 1
while i <= n_reps:
    i += 1
    if i == 3:
        continue
    print(i)</pre>
```

$$i = 2$$

Loop



continue

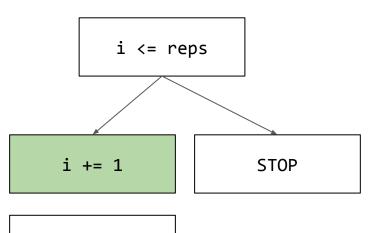
print(i)

Output

```
# continue example
reps = 5
i = 1
while i <= n_reps:
    i += 1
    if i == 3:
        continue
    print(i)</pre>
```

$$i = 2$$

Loop



continue

print(i)

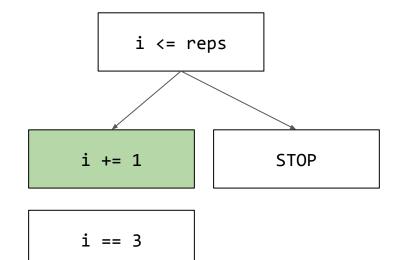
i == 3

Output

```
# continue example
reps = 5
i = 1
while i <= n_reps:
    i += 1
    if i == 3:
        continue
    print(i)</pre>
```

$$i = 3$$

Loop



continue

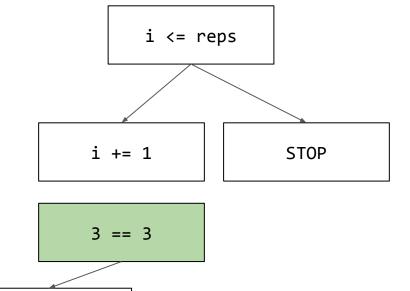
print(i)

Output

```
# continue example
reps = 5
i = 1
while i <= n_reps:
    i += 1
    if i == 3:
        continue
    print(i)</pre>
```

$$i = 3$$

Loop



print(i)

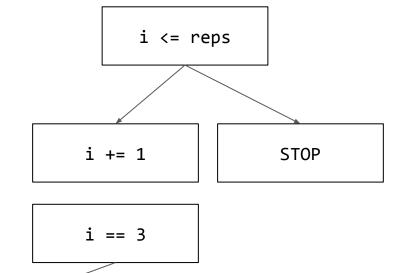
continue

Output

```
# continue example
reps = 5
i = 1
while i <= n_reps:
    i += 1
    if i == 3:
        continue
    print(i)</pre>
```

$$i = 3$$

Loop



print(i)

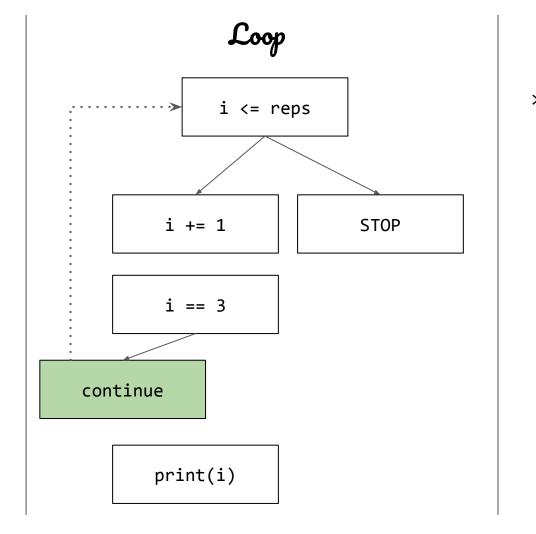
continue

Output

```
# continue example
reps = 5
i = 1
while i <= n_reps:
    i += 1
    if i == 3:
        continue
    print(i)</pre>
```

$$reps = 5$$

$$i = 3$$



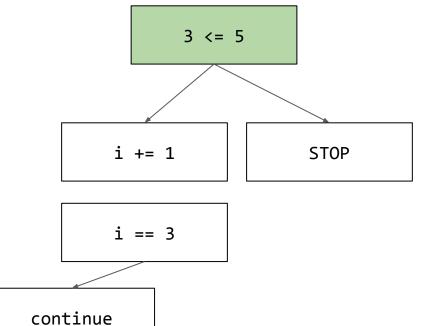
Output

```
# continue example
reps = 5
i = 1
while i <= n_reps:
    i += 1
    if i == 3:
        continue
    print(i)</pre>
```

$$reps = 5$$

$$i = 3$$

Loop



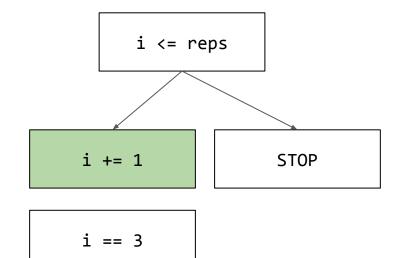
print(i)

Dulpul

```
# continue example
reps = 5
i = 1
while i <= n_reps:
    i += 1
    if i == 3:
        continue
    print(i)</pre>
```

$$i = 3$$

Loop



continue

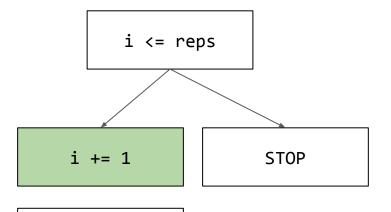
print(i)

Output

```
# continue example
reps = 5
i = 1
while i <= n_reps:
    i += 1
    if i == 3:
        continue
    print(i)</pre>
```

$$i = 4$$

Loop



continue

print(i)

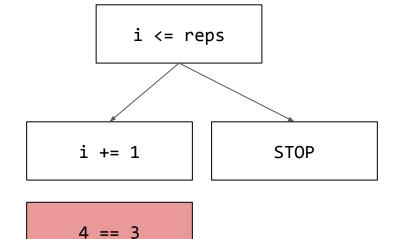
Output

```
# continue example
reps = 5
i = 1
while i <= n_reps:
    i += 1
    if i == 3:
        continue
    print(i)</pre>
```

$$reps = 5$$

$$i = 4$$

Loop



continue

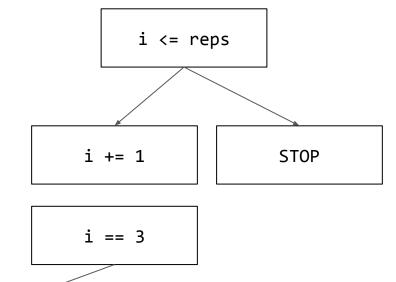
print(i)

Output

```
# continue example
reps = 5
i = 1
while i <= n_reps:
    i += 1
    if i == 3:
        continue
    print(i)</pre>
```

$$i = 4$$

Loop



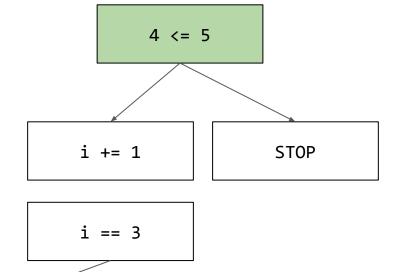
print(i)

continue

```
# continue example
reps = 5
i = 1
while i <= n_reps:
    i += 1
    if i == 3:
        continue
    print(i)</pre>
```

$$i = 4$$

Loop



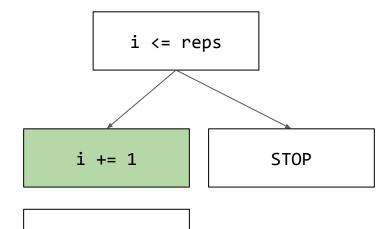
print(i)

continue

```
# continue example
reps = 5
i = 1
while i <= n_reps:
    i += 1
    if i == 3:
        continue
    print(i)</pre>
```

$$i = 4$$

Loop



continue

print(i)

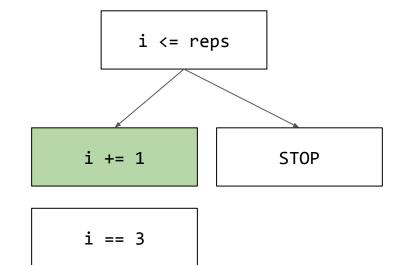
i == 3

```
# continue example
reps = 5
i = 1
while i <= n_reps:
    i += 1
    if i == 3:
        continue
    print(i)</pre>
```

$$reps = 5$$

$$i = 5$$

Loop



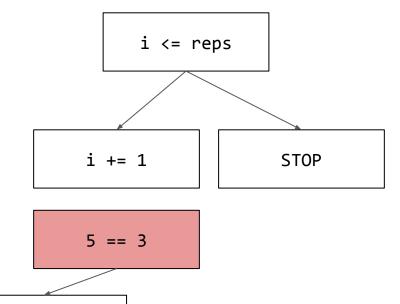
print(i)

continue

```
# continue example
reps = 5
i = 1
while i <= n_reps:
    i += 1
    if i == 3:
        continue
    print(i)</pre>
```

$$i = 5$$

Loop



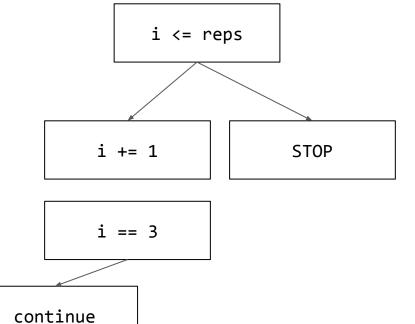
print(i)

continue

```
# continue example
reps = 5
i = 1
while i <= n_reps:
    i += 1
    if i == 3:
        continue
    print(i)</pre>
```

$$i = 5$$

Loop

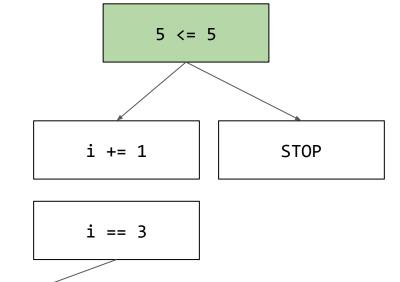


print(i)

```
# continue example
reps = 5
i = 1
while i <= n_reps:
    i += 1
    if i == 3:
        continue
    print(i)</pre>
```

$$i = 5$$

Loop



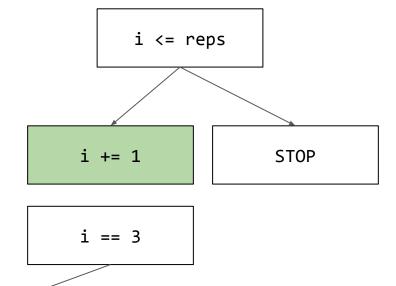
print(i)

continue

```
# continue example
reps = 5
i = 1
while i <= n_reps:
    i += 1
    if i == 3:
        continue
    print(i)</pre>
```

$$i = 5$$

Loop



continue

print(i)

Jutput

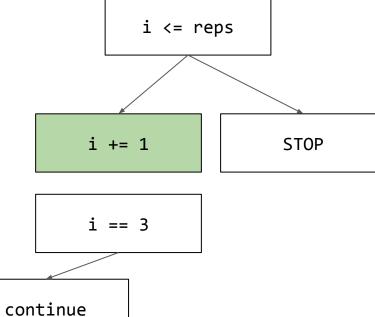
- 24
- > 4> 5

```
# continue example
reps = 5
i = 1
while i <= n_reps:
    i += 1
    if i == 3:
        continue
    print(i)</pre>
```

$$reps = 5$$

$$i = 6$$

Loop



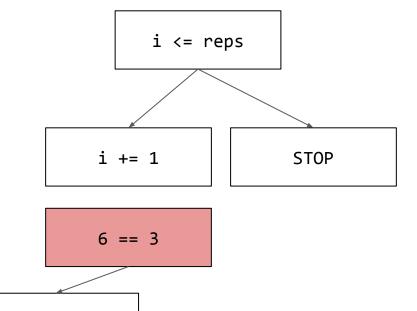
print(i)

```
# continue example
reps = 5
i = 1
while i <= n_reps:
    i += 1
    if i == 3:
        continue
    print(i)</pre>
```

$$reps = 5$$

$$i = 6$$

Loop



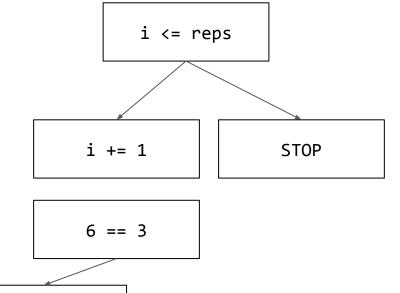
print(i)

continue

```
reps = 5
i = 1
while i <= n_reps:</pre>
    i += 1
    if i == 3:
        continue
    print(i)
```

$$reps = 5$$

$$i = 6$$



print(i)

continue

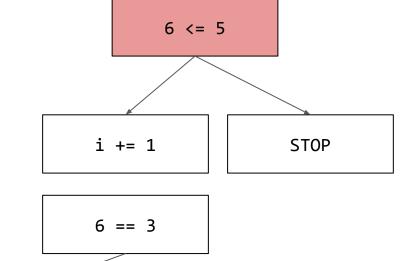
- > 2 > 4 > 5
- > 6

```
# continue example
reps = 5
i = 1
while i <= n_reps:
    i += 1
    if i == 3:
        continue
    print(i)</pre>
```

$$reps = 5$$

$$i = 6$$

Loop



print(i)

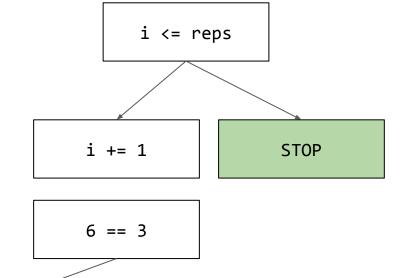
continue

Output

```
# continue example
reps = 5
i = 1
while i <= n_reps:
    i += 1
    if i == 3:
        continue
    print(i)</pre>
```

$$i = 6$$

Loop



print(i)

continue

example 4

```
# else example without break
reps = 3
i = 1
while i <= reps:
    print(i)
    i += 1
else:
    print('loop has ended')</pre>
```

reps = 3

$$i = 1$$

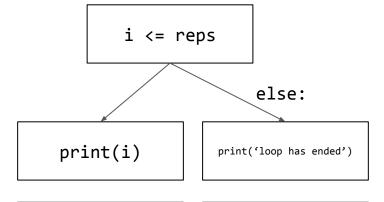
Loop

```
# else example without break
reps = 3
i = 1
while i <= reps:
    print(i)
    i += 1
else:
    print('loop has ended')</pre>
```

$$reps = 3$$

$$i = 1$$

Loop



i += 1

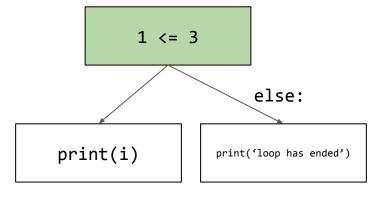
STOP

```
# else example without break
reps = 3
i = 1
while i <= reps:
    print(i)
    i += 1
else:
    print('loop has ended')</pre>
```

$$reps = 3$$

$$i = 1$$

Loop



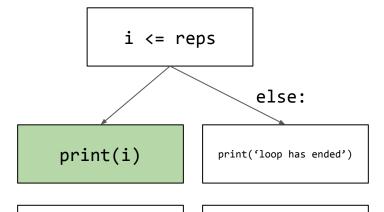
STOP

```
# else example without break
reps = 3
i = 1
while i <= reps:
    print(i)
    i += 1
else:
    print('loop has ended')</pre>
```

$$reps = 3$$

$$i = 1$$

Loop



i += 1

STOP

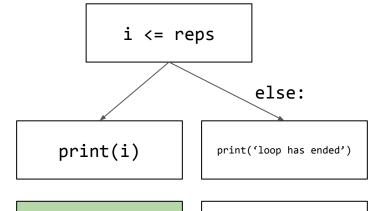
Output

```
# else example without break
reps = 3
i = 1
while i <= reps:
    print(i)
    i += 1
else:
    print('loop has ended')</pre>
```

$$reps = 3$$

$$i = 1$$

Loop



STOP

i += 1

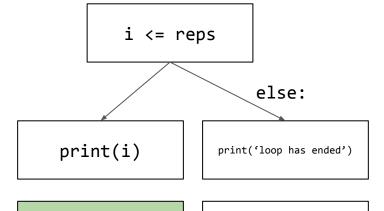
Output

```
# else example without break
reps = 3
i = 1
while i <= reps:
    print(i)
    i += 1
else:
    print('loop has ended')</pre>
```

$$reps = 3$$

$$i = 2$$

Loop



STOP

i += 1

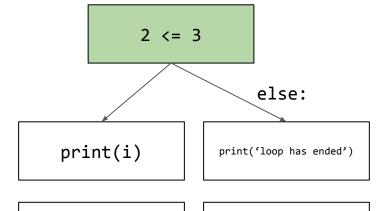
Output

```
# else example without break
reps = 3
i = 1
while i <= reps:
    print(i)
    i += 1
else:
    print('loop has ended')</pre>
```

$$reps = 3$$

$$i = 2$$

Loop



STOP

i += 1

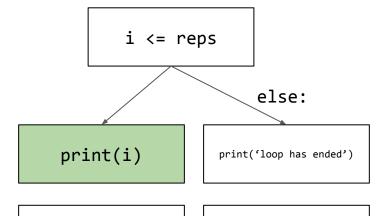
Output

```
# else example without break
reps = 3
i = 1
while i <= reps:
    print(i)
    i += 1
else:
    print('loop has ended')</pre>
```

$$reps = 3$$

$$i = 2$$

Loop



STOP

i += 1

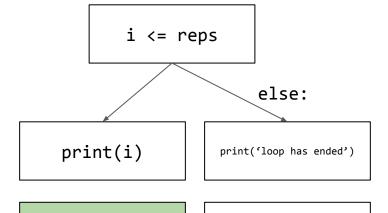
Output

12

```
# else example without break
reps = 3
i = 1
while i <= reps:
    print(i)
    i += 1
else:
    print('loop has ended')</pre>
```

$$i = 2$$

Loop



STOP

i += 1

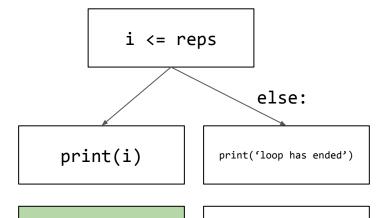
```
12
```

```
# else example without break
reps = 3
i = 1
while i <= reps:
    print(i)
    i += 1
else:
    print('loop has ended')</pre>
```

$$reps = 3$$

$$i = 3$$

Loop



STOP

i += 1

Output

12

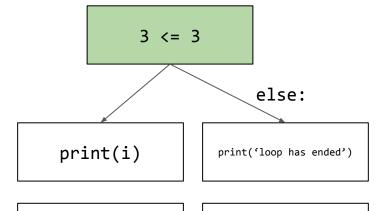
```
# else example without break
reps = 3
i = 1
while i <= reps:
    print(i)
    i += 1
else:
    print('loop has ended')</pre>
```

$$reps = 3$$

$$i = 3$$

Loop

i += 1



STOP

Output

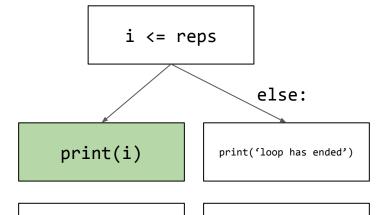
12

```
# else example without break
reps = 3
i = 1
while i <= reps:
    print(i)
    i += 1
else:
    print('loop has ended')</pre>
```

$$reps = 3$$

$$i = 3$$

Loop



STOP

i += 1

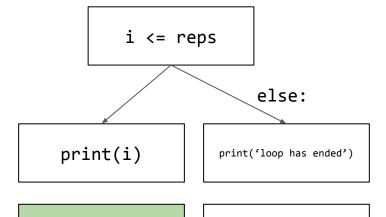
```
> 1> 2> 3
```

```
# else example without break
reps = 3
i = 1
while i <= reps:
    print(i)
    i += 1
else:
    print('loop has ended')</pre>
```

$$reps = 3$$

$$i = 3$$

Loop



STOP

i += 1

Output

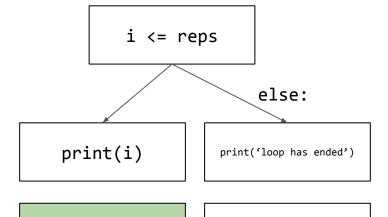
> 1> 2> 3

```
# else example without break
reps = 3
i = 1
while i <= reps:
    print(i)
    i += 1
else:
    print('loop has ended')</pre>
```

$$reps = 3$$

$$i = 4$$

Loop



STOP

i += 1

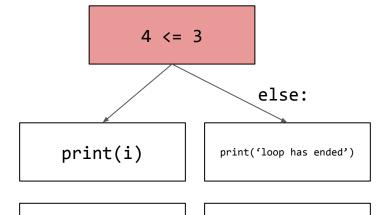
```
12
```

```
# else example without break
reps = 3
i = 1
while i <= reps:
    print(i)
    i += 1
else:
    print('loop has ended')</pre>
```

$$reps = 3$$

$$i = 4$$

Loop



STOP

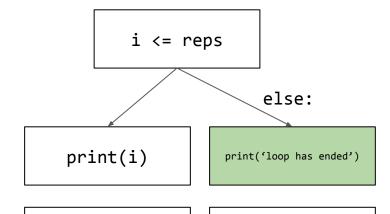
i += 1

- 12
- > 3

```
# else example without break
reps = 3
i = 1
while i <= reps:
    print(i)
    i += 1
else:
    print('loop has ended')</pre>
```

$$i = 4$$

Loop



STOP

i += 1

Output

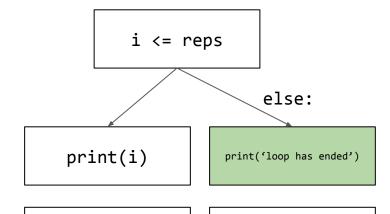
```
> 1
```

> 'loop has ended'

```
# else example without break
reps = 3
i = 1
while i <= reps:
    print(i)
    i += 1
else:
    print('loop has ended')</pre>
```

$$i = 4$$

Loop



STOP

i += 1

Output

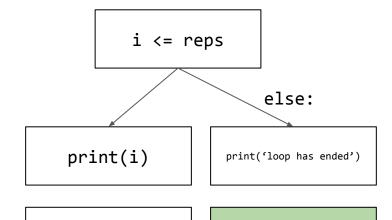
```
> 1
```

> 'loop has ended'

```
# else example without break
reps = 3
i = 1
while i <= reps:
    print(i)
    i += 1
else:
    print('loop has ended')</pre>
```

$$i = 4$$

Loop



STOP

i += 1

- > 1
- > 2
- > 3
- > 'loop has ended'

example 5

```
# else example with break
reps = 5
i = 1
while i <= n_reps:
    if i == 3:
        break
    print(i)
    i += 1
else:
    print('loop has ended')</pre>
```

$$reps = 5$$

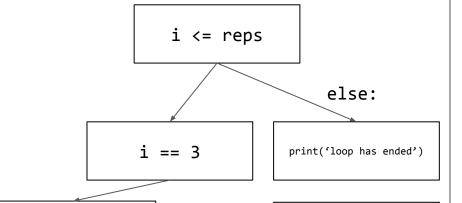
$$i = 1$$

Loop

```
# else example with break
reps = 5
i = 1
while i <= n_reps:
    if i == 3:
        break
    print(i)
    i += 1
else:
    print('loop has ended')</pre>
```

$$i = 1$$

Loop

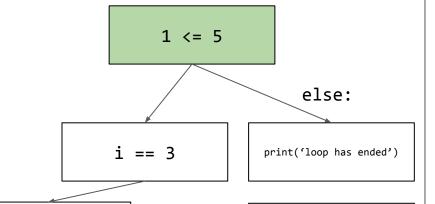


break

STOP

```
# else example with break
reps = 5
i = 1
while i <= n_reps:
    if i == 3:
        break
    print(i)
    i += 1
else:
    print('loop has ended')</pre>
```

Loop



break

STOP

print(i)

Output

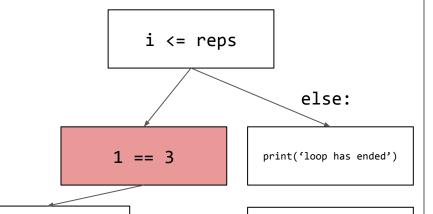
STOP

```
# else example with break
reps = 5
i = 1
while i <= n_reps:
    if i == 3:
        break
    print(i)
    i += 1
else:
    print('loop has ended')</pre>
```

$$reps = 5$$

$$i = 1$$

Loop



STOP

STOP

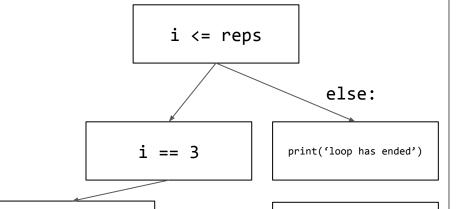
break

print(i)

i += 1

```
# else example with break
reps = 5
i = 1
while i <= n_reps:
    if i == 3:
        break
    print(i)
    i += 1
else:
    print('loop has ended')</pre>
```

Loop



STOP

break

STOP

print(i)

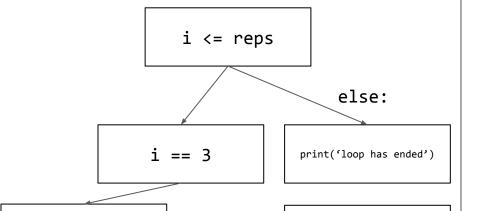
i += 1

Output

```
# else example with break
reps = 5
i = 1
while i <= n_reps:
    if i == 3:
        break
    print(i)
    i += 1
else:
    print('loop has ended')</pre>
```

$$i = 1$$

Loop



STOP

break

STOP print(i)

i += 1

Output

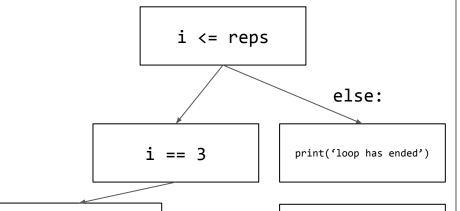
> 1

/ 1

```
# else example with break
reps = 5
i = 1
while i <= n_reps:
    if i == 3:
        break
    print(i)
    i += 1
else:
    print('loop has ended')</pre>
```

$$i = 2$$

Loop



break

STOP

print(i)

i += 1

Output

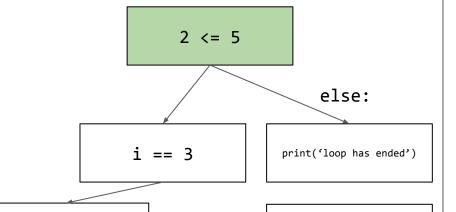
> 1

STOP

```
# else example with break
reps = 5
i = 1
while i <= n_reps:
    if i == 3:
        break
    print(i)
    i += 1
else:
    print('loop has ended')</pre>
```

$$i = 2$$

Loop



break

STOP

print(i)

i += 1

Output

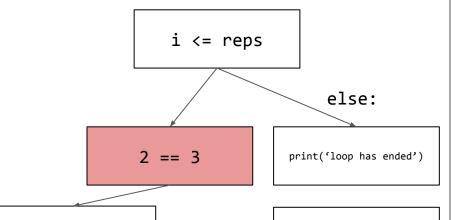
> 1

STOP

```
# else example with break
reps = 5
i = 1
while i <= n_reps:
    if i == 3:
        break
    print(i)
    i += 1
else:
    print('loop has ended')</pre>
```

$$i = 2$$

Loop



STOP

STOP print(i)

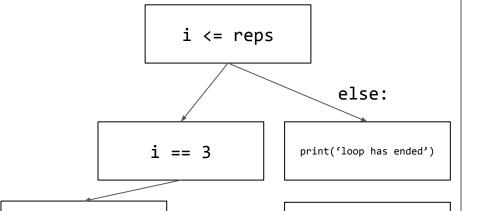
break

Output

```
# else example with break
reps = 5
i = 1
while i <= n_reps:
    if i == 3:
        break
    print(i)
    i += 1
else:
    print('loop has ended')</pre>
```

$$i = 2$$

Loop



STOP

STOP

break

print(i)

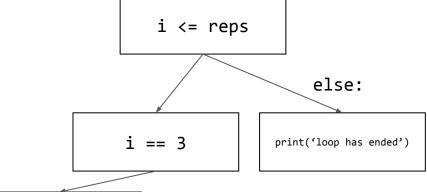
i += 1

```
# else example with break
reps = 5
i = 1

while i <= n_reps:
    if i == 3:
        break
    print(i)
    i += 1
else:
    print('loop has ended')</pre>
```

$$i = 2$$

Loop



break

STOP print(i)

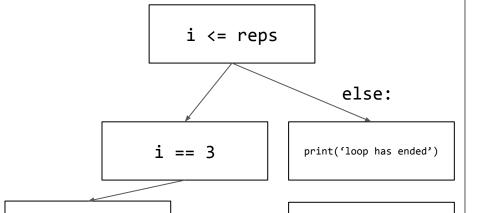
Output

> 1

STOP

```
# else example with break
reps = 5
i = 1
while i <= n_reps:
    if i == 3:
        break
    print(i)
    i += 1
else:
    print('loop has ended')</pre>
```

Loop



STOP

STOP

break

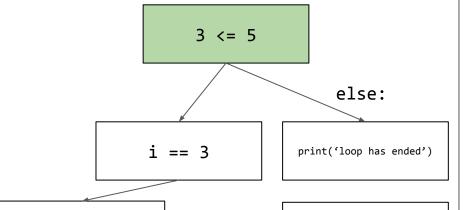
print(i)

i += 1

```
# else example with break
reps = 5
i = 1
while i <= n_reps:
    if i == 3:
        break
    print(i)
    i += 1
else:
    print('loop has ended')</pre>
```

$$i = 3$$

Loop



break

STOP print(i)

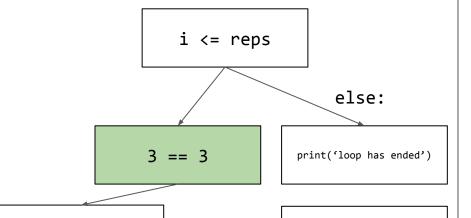
Output

STOP

```
# else example with break
reps = 5
i = 1
while i <= n_reps:
    if i == 3:
        break
    print(i)
    i += 1
else:
    print('loop has ended')</pre>
```

$$i = 3$$

Loop



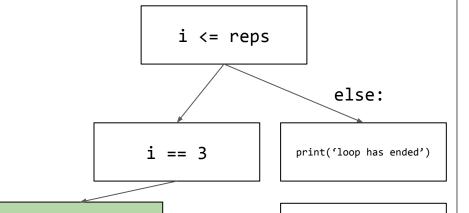
STOP

STOP print(i)

break

```
# else example with break
reps = 5
i = 1
while i <= n_reps:</pre>
        break
    print(i)
else:
    print('loop has ended')
```

$$i = 3$$



STOP

STOP

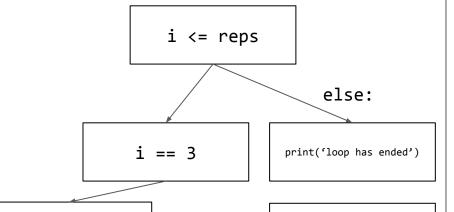
break

print(i)

i += 1

```
# else example with break
reps = 5
i = 1
while i <= n_reps:</pre>
        break
    print(i)
else:
    print('loop has ended')
```

$$i = 3$$



STOP

break

print(i) STOP