

Loop optimisation

Applied to, possibly, everything rid of one at all

```
while i < 100
```

$$a = \sin(x) / \cos(x) + i$$

i++



```
while i < 100
```


$$a = t + i$$

i++

$$t = \sin(x) / \cos(x)$$

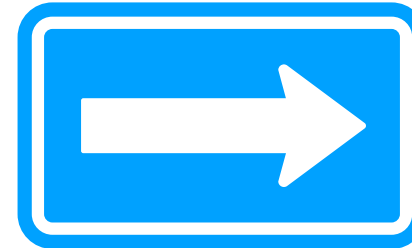
Loop optimisation

Applies to a loop, possibly, even getting rid of one at all

```
while i < 100
```

```
  a = sin(x) / cos(x) + i
```

```
  i++
```



```
t = sin(x) / cos(x)
```

```
while i < 100
```

```
  a = t + i
```

```
  i++
```

Global optimisation

Applies to the whole function with its own loops, ifs, etc.