Loops are used to execute one or more statements some number of times, e.g. the following code counts from one to ten, pausing for half a second to show the current value of the variable *counter*:

```
when clicked

set counter to 1

repeat 10

say counter for 0.5 secs

change counter by 1
```

The next program adds the numbers 1 to the value entered by the user using a loop:

```
when clicked

set total v to 0

set counter v to 0

ask Enter largest value: and wait

set n v to answer

repeat n

change counter v by 1

set total v to total + counter

say total
```

Sample run:



Finally, using a formula that has been attributed to Gauss to do the same thing:

```
when clicked

ask Enter largest value: and wait

set n to answer

say n * n + 1 / 2
```