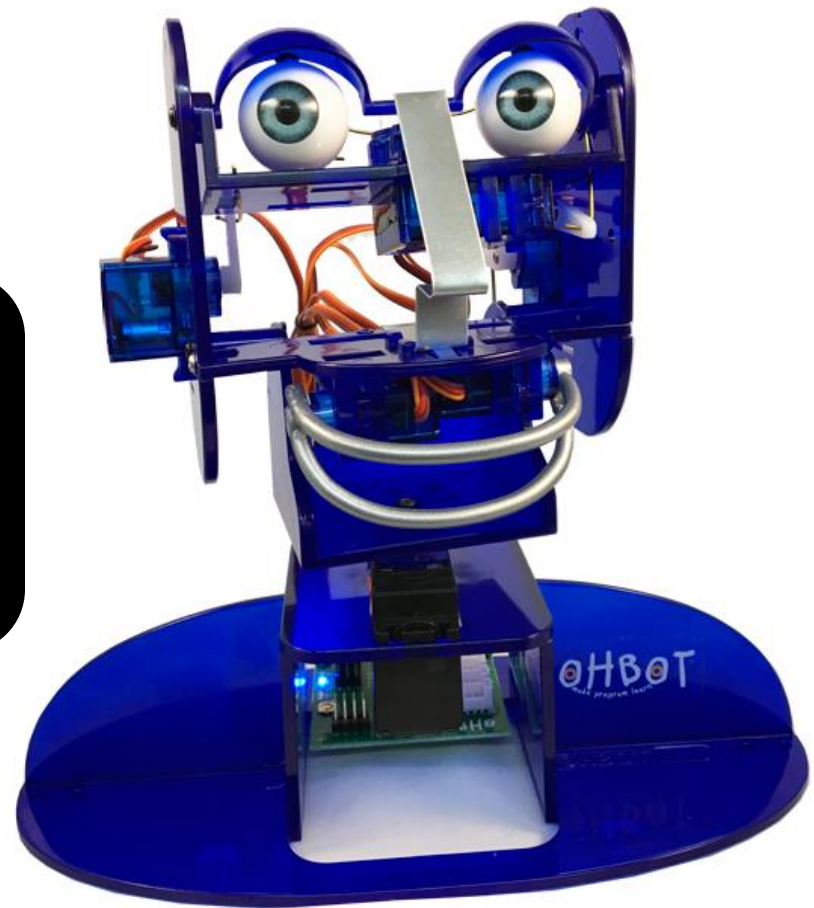


Lesson 4 Repeat Until

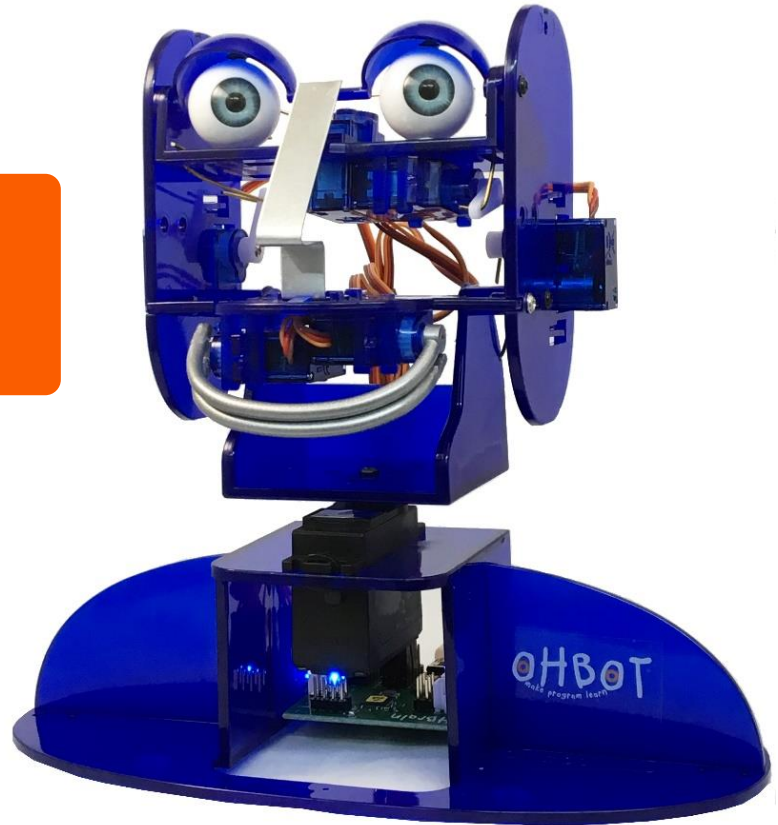
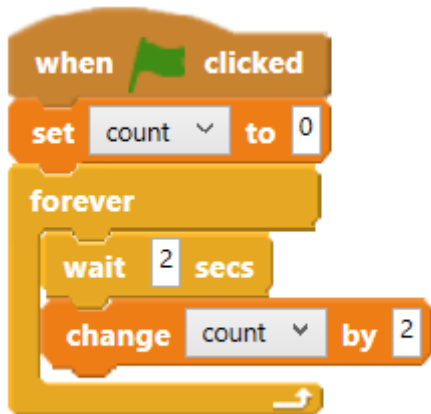
I can program a robot to speak the value of a variable

I can program a robot to count until a condition is true



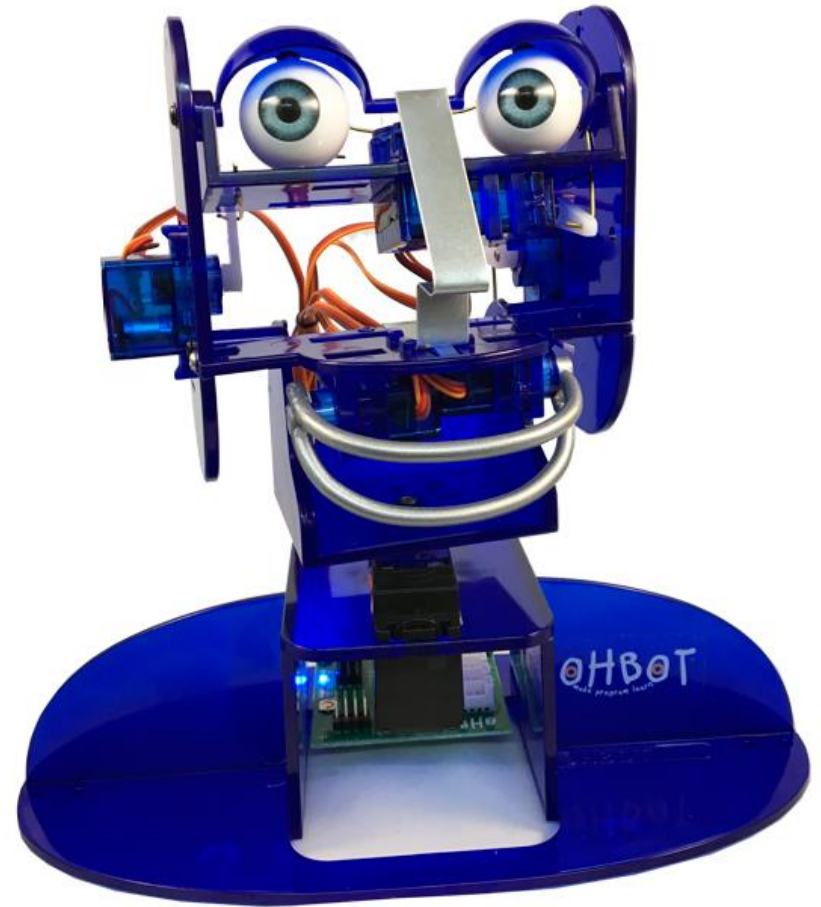
Activity 1

This code sequence makes Ohbot count in twos. Can you make Ohbot speak the numbers as it counts up?



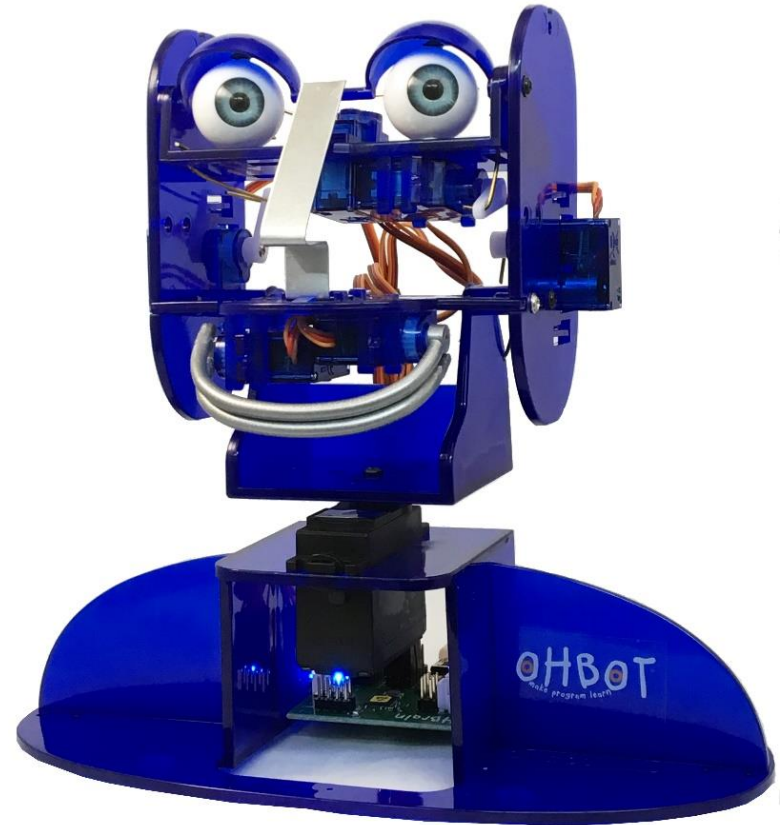
Here's one way

```
when clicked
  set count to 0
  forever
    say count
    wait 2 secs
    change count by 2
```



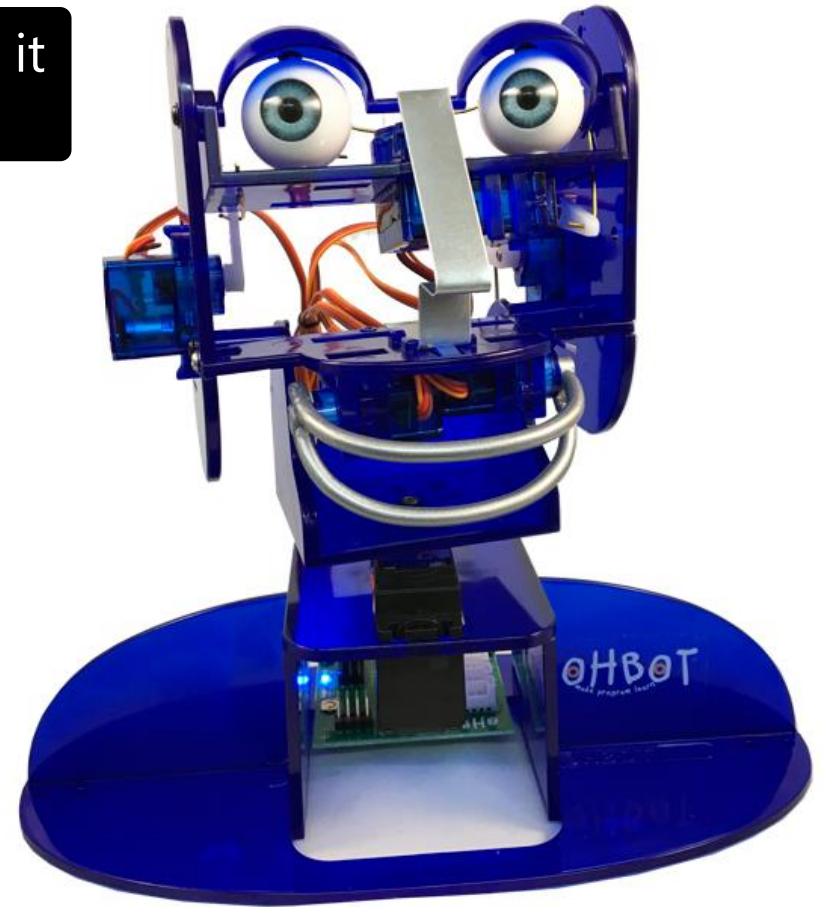
Activity 2

Can you make Ohbot count aloud in tens and stop when it gets to 100?



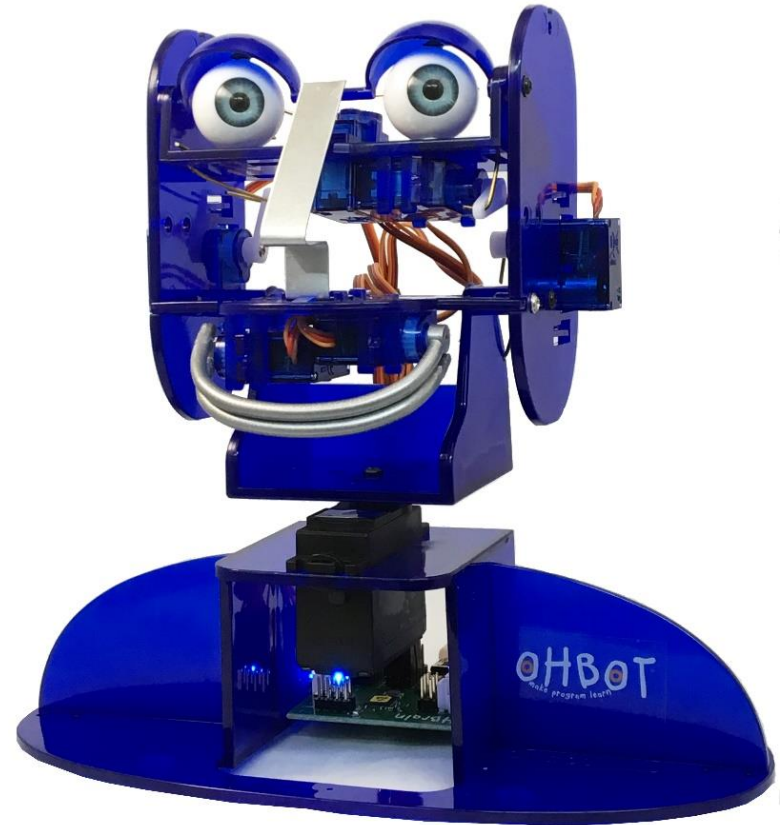
Example: Count in tens and stop when it gets to 100

```
when clicked
set count to 0
repeat until count = 100
  say count
  wait 2 secs
  change count by 2
```



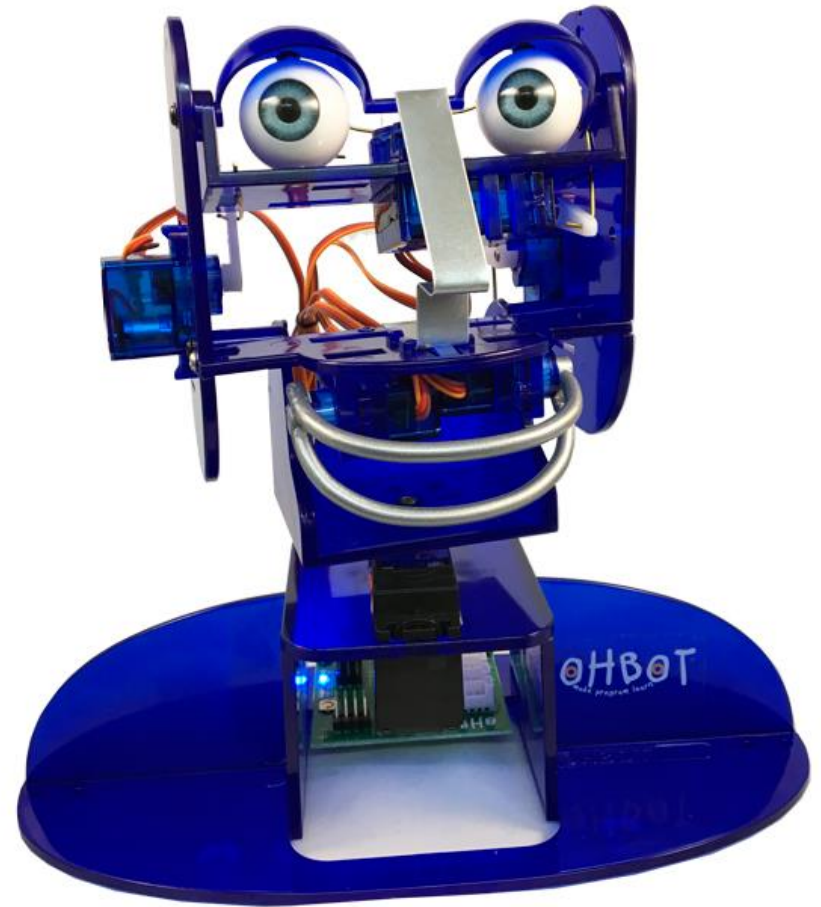
Activity 3

Can you make Ohbot count back in tens from 200. Can you make Ohbot stop when it gets to 100?



Example: Counting back from 200 to 100 in tens

```
when clicked
  set count to 200
  repeat until count = 100
    say count
    wait 2 secs
    change count by -10
```

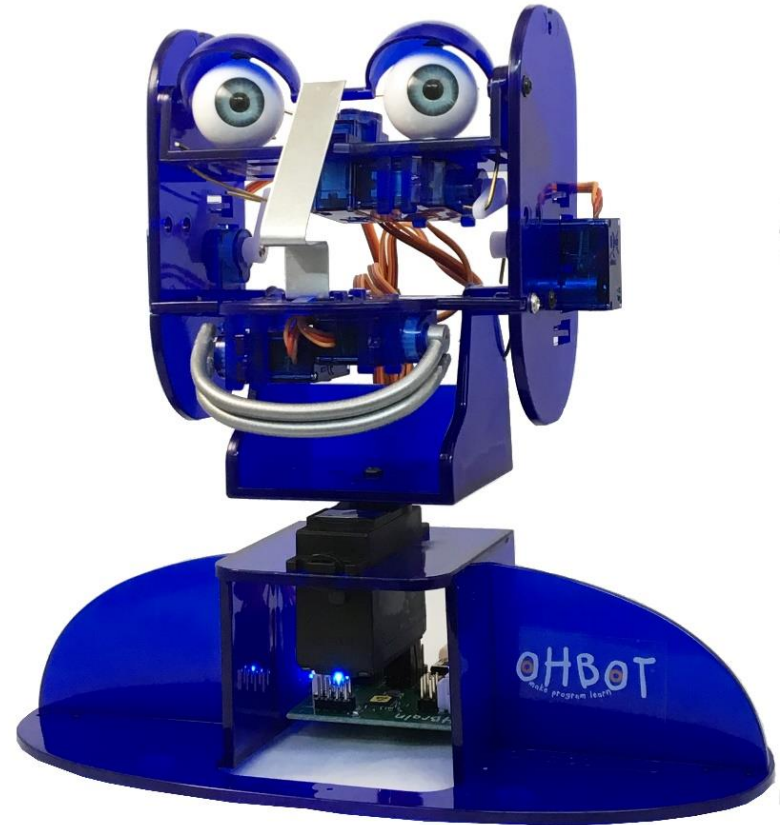


Activity 4

Can you make Ohbot count back in fives, starting at 250 and stopping when it gets to 200?

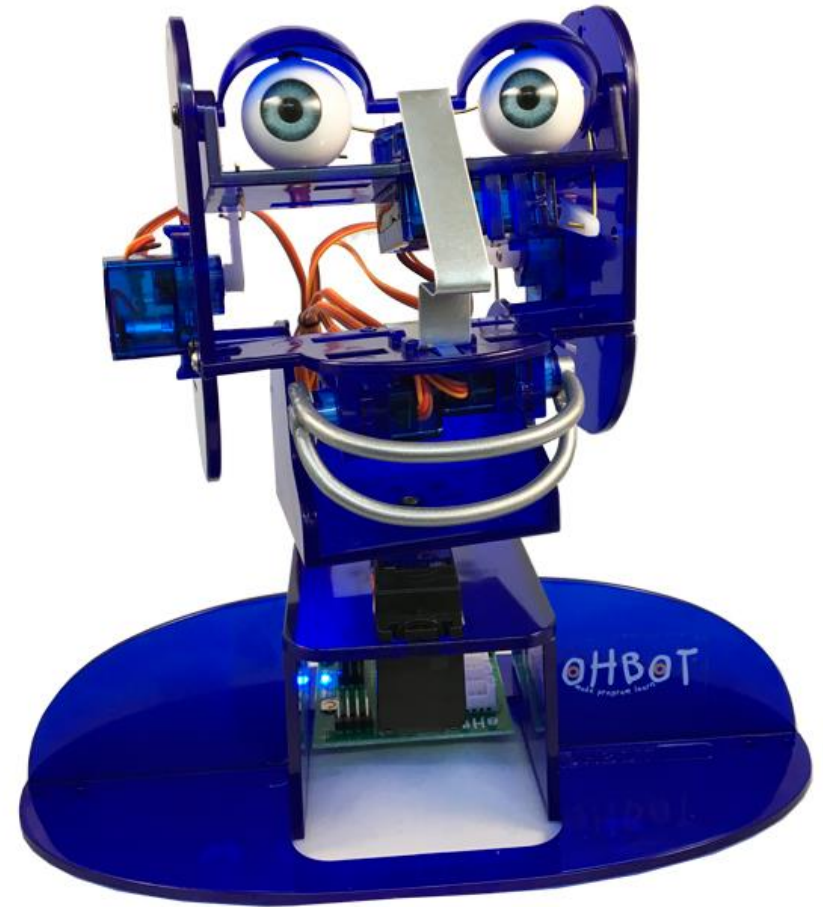
Activity 5

Can you make Ohbot count back in twos, starting at 100 and stopping when it gets to 20?



Extension

Can you make Ohbots lips move as it counts?



Example

```
when clicked
  set count to 200
  repeat until count = 100
    say count
    set BottomLip to 5
    wait 0.5 secs
    set BottomLip to 10
    wait 0.5 secs
    set BottomLip to 5
    wait 0.5 secs
    change count by -10
```

Did you find another way?

