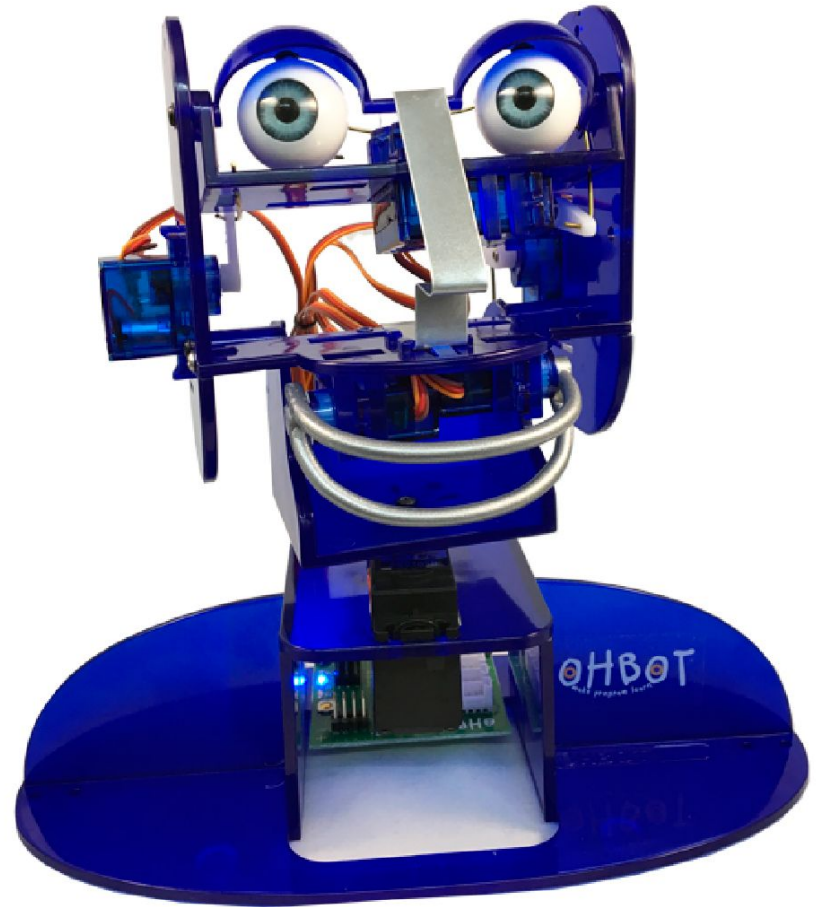
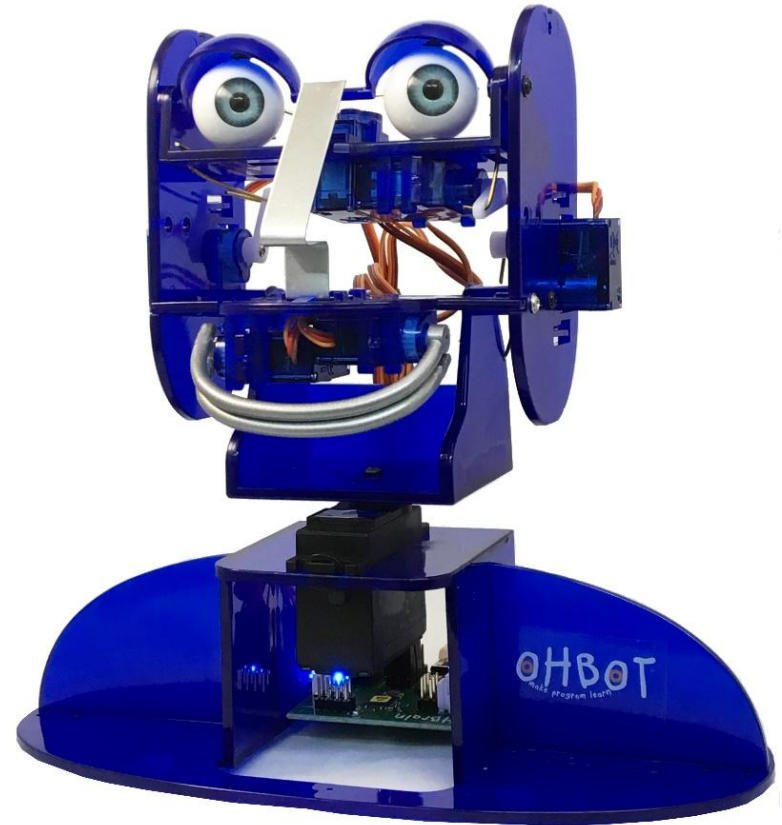


Lesson 2: If-then

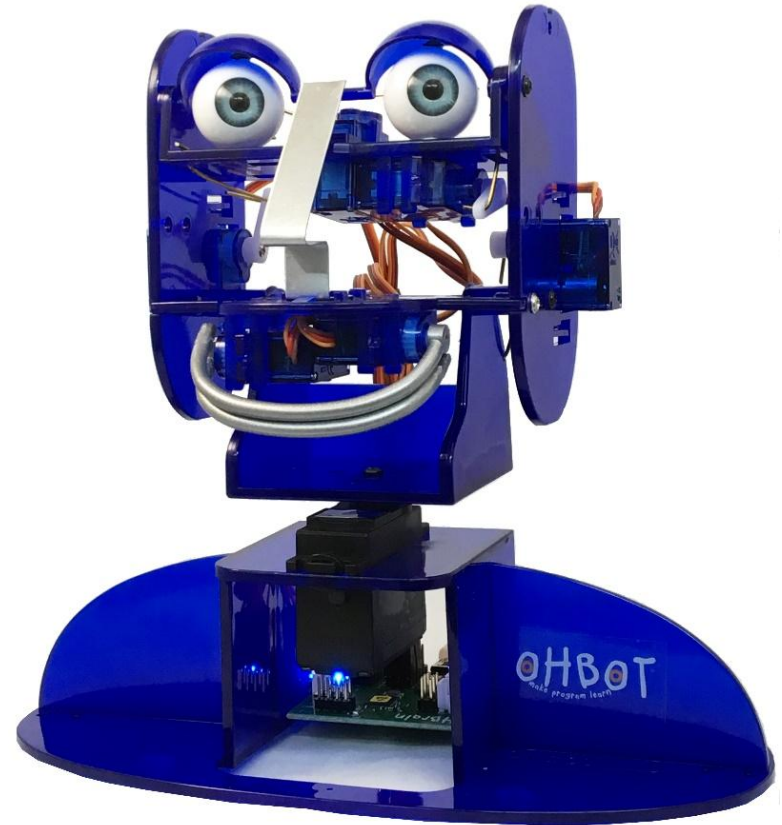
I can use an if-then instruction in my program



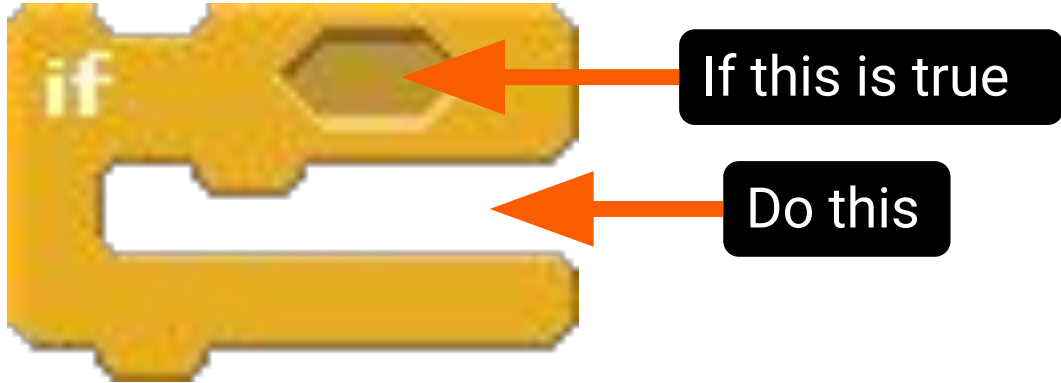
What does 'if' mean?



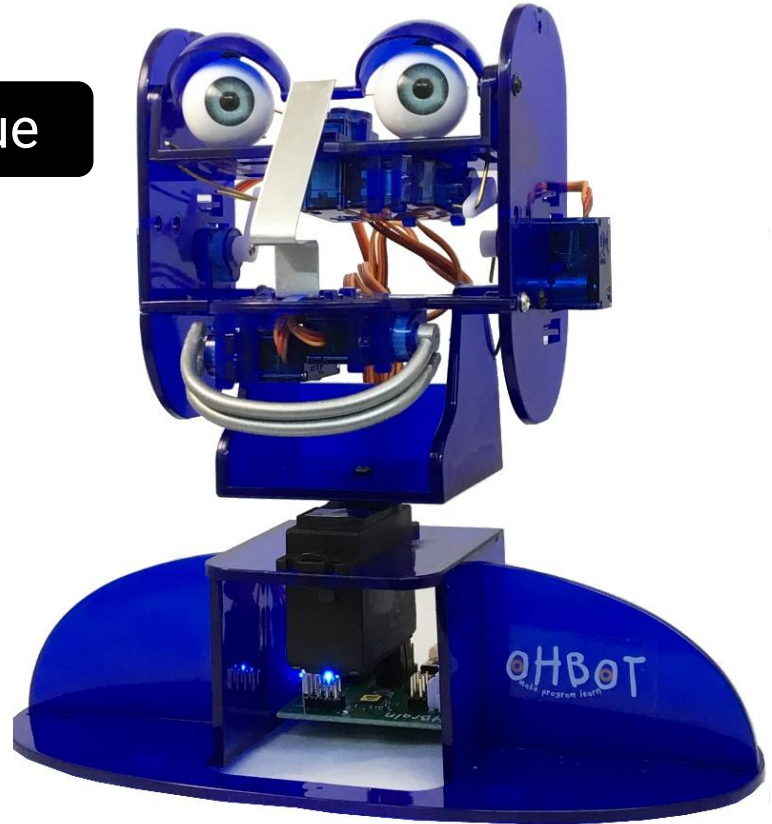
Can you put 'if' into a sentence?



If is a conditional instruction



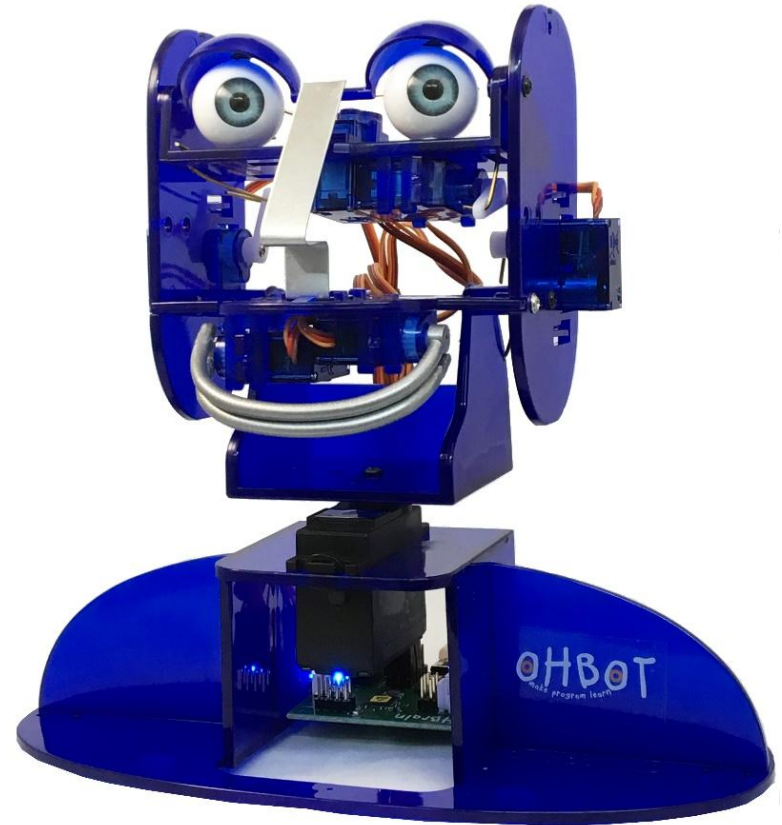
```
if key space pressed? then  
  say Hello! until done
```



Ohbot can give the correct response:

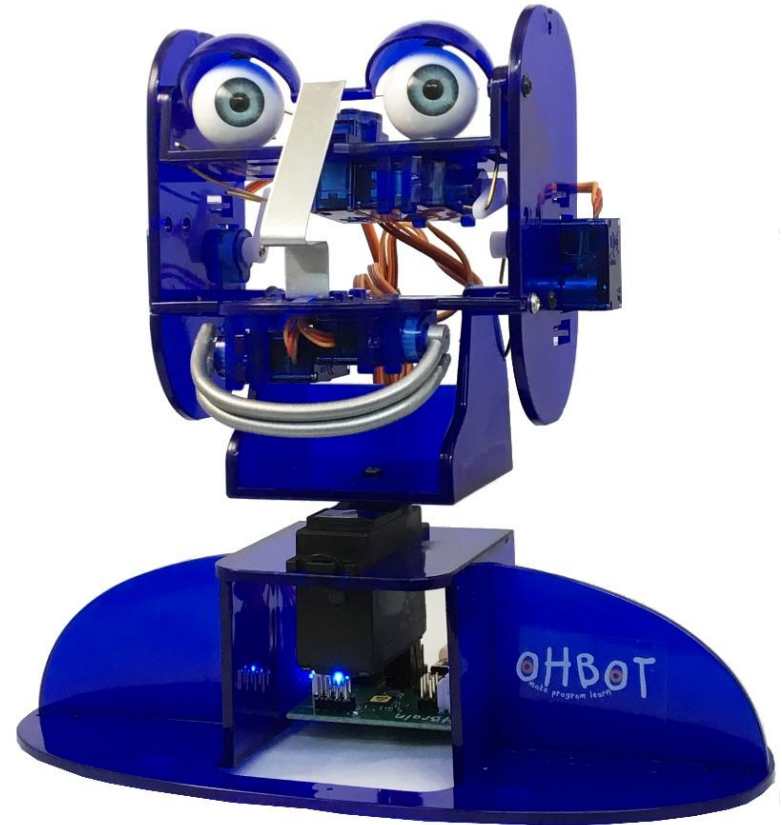
If it is before 12 noon, Ohbot says 'Good morning', and if it is after 12 noon I say 'Good afternoon'.

File, Save As – “if current hour”



Using an *if* instruction

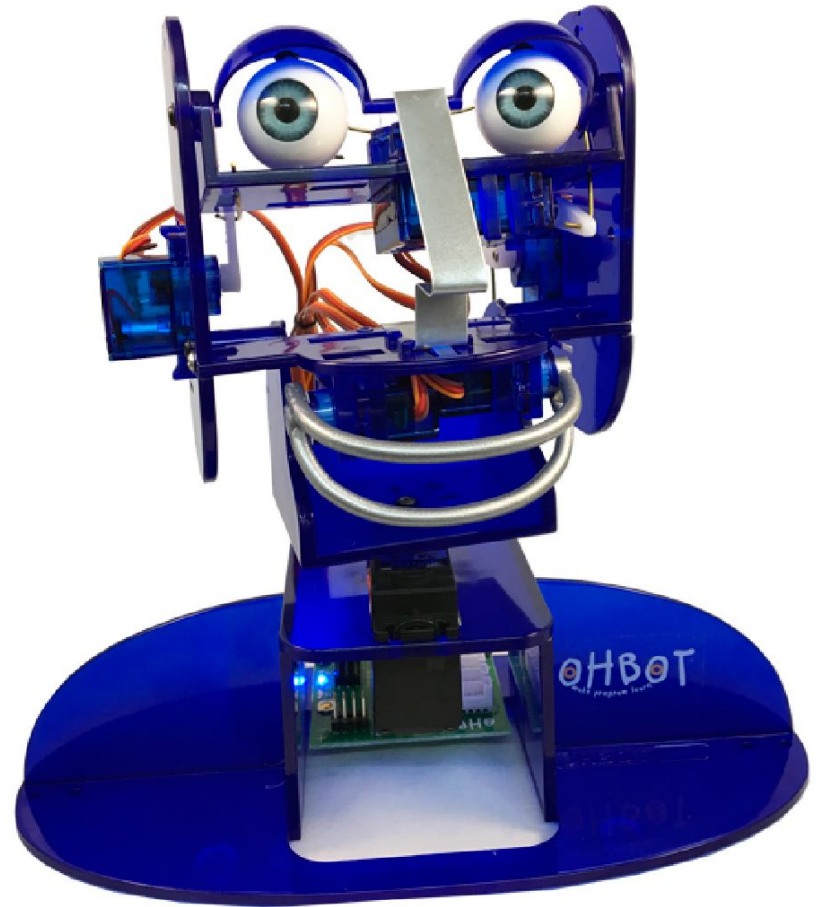
```
when clicked
if current hour > 12 then
say Good afternoon. This afternoon we will be having Games and computing. until done
if current hour < 12 then
say Good morning. What would you like for lunch today? until done
```



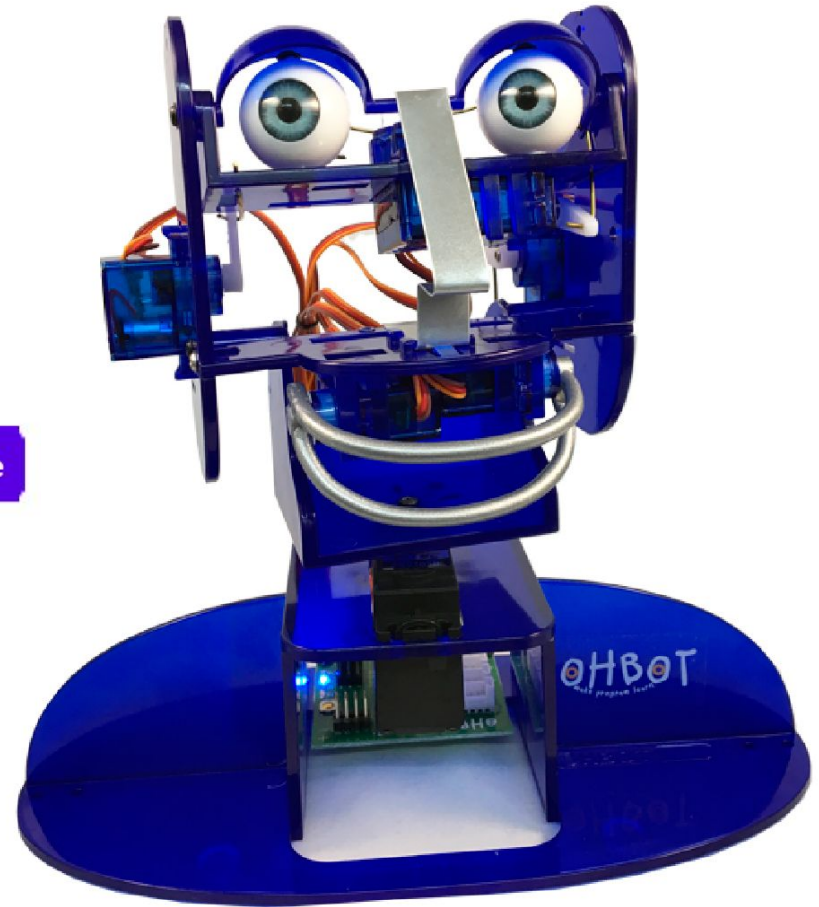
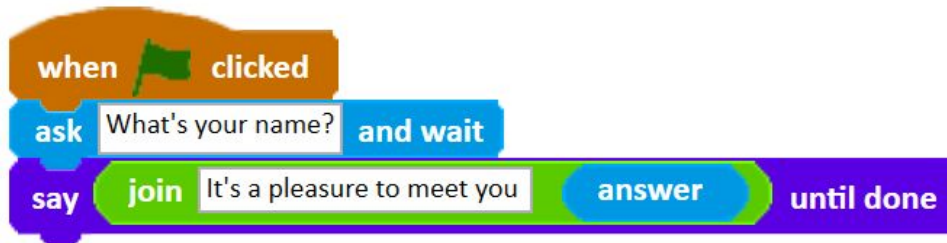
Demonstration

Ohbot asks you a question. You type an answer. Ohbot responds to your answer.

We can write code together. Ohbot will ask our name and respond.



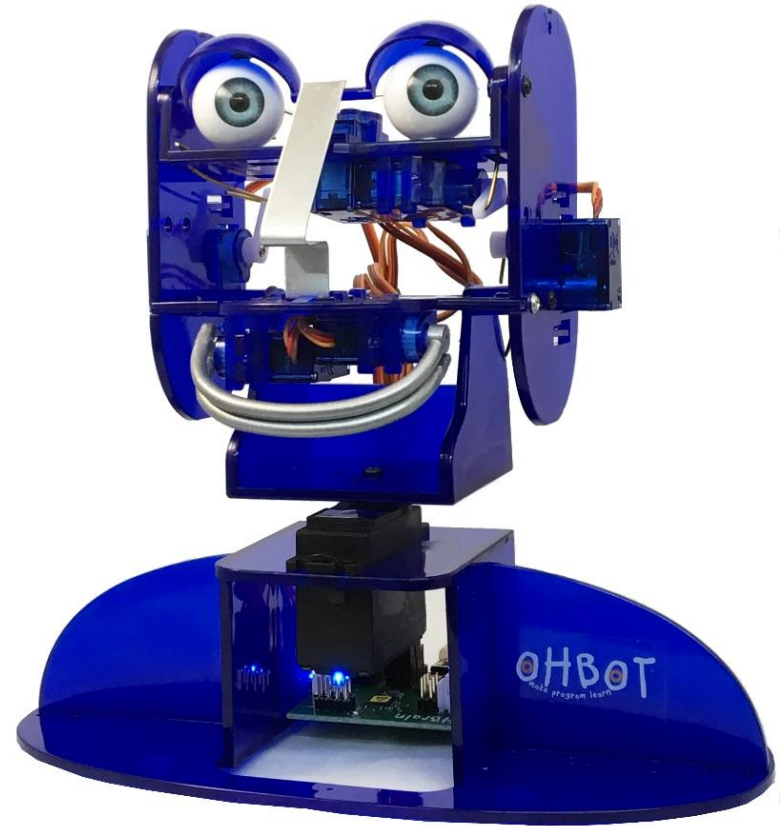
Demonstration



Activity 1

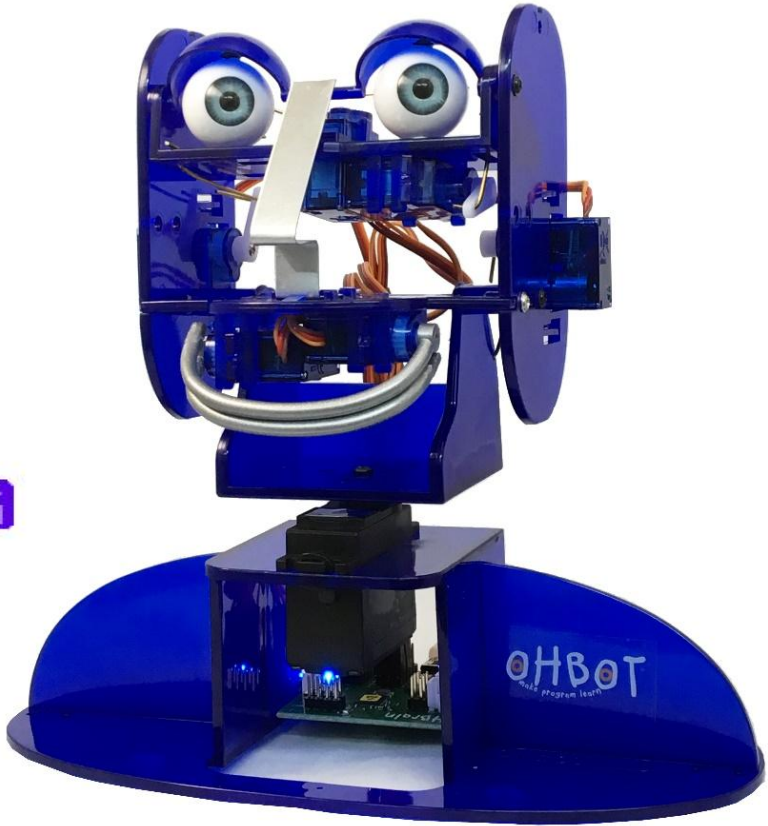
Ohbot can be programmed to respond to your question with different answers.

Can you write some code to ask the question, "What is your favourite vegetable?" and respond appropriately?



Activity 1 Example

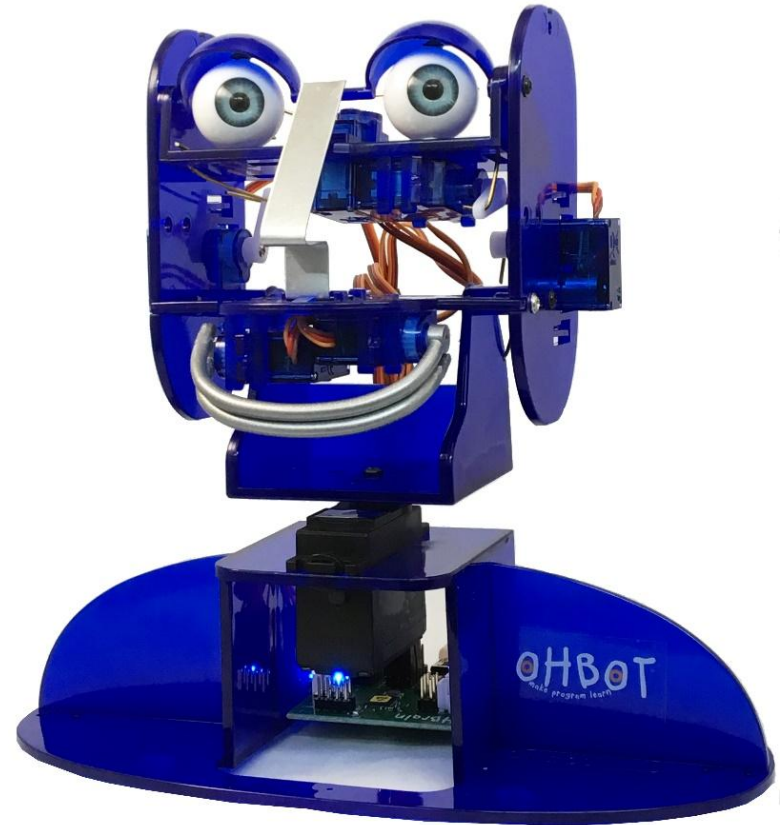
```
when clicked
ask "What is your favourite vegetable?" and wait
wait 2 secs
if answer = broccoli then
say "Good choice human. Broccoli is a healthy and delicious vegetable." until done
if answer = brussel sprouts then
say "Well I love those too, but have you ever considered broccoli? It's delicious I've heard." until done
```



Activity 2

Ohbot can respond to your question with different answers.

Can you write your own question for Ohbot to ask and respond to?



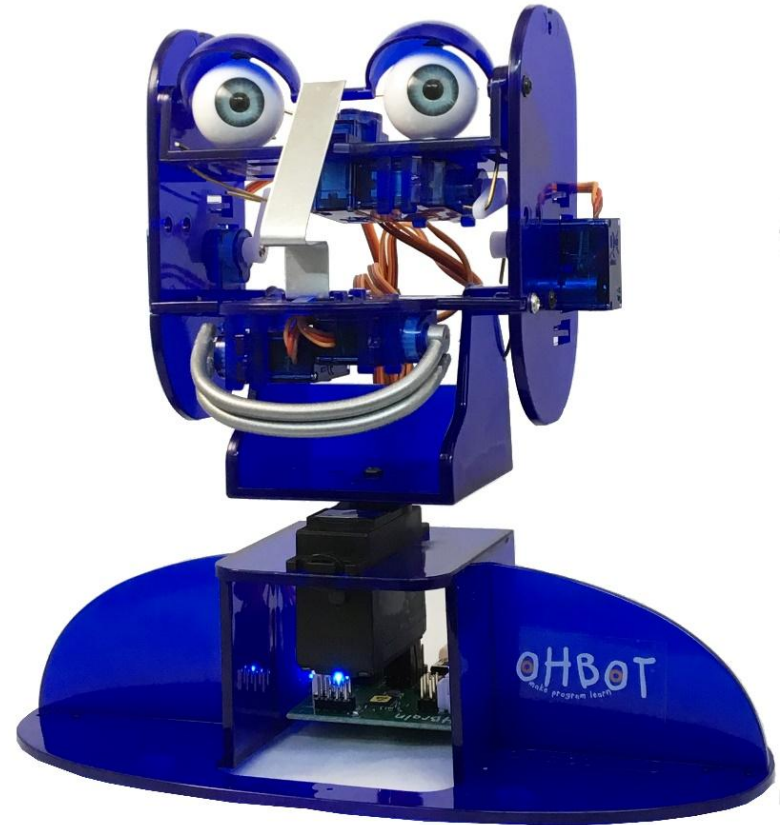


Extension 1

You will need a dice. Throw it.

Can you write a program so Ohbot asks the score and responds appropriately to each possible score?

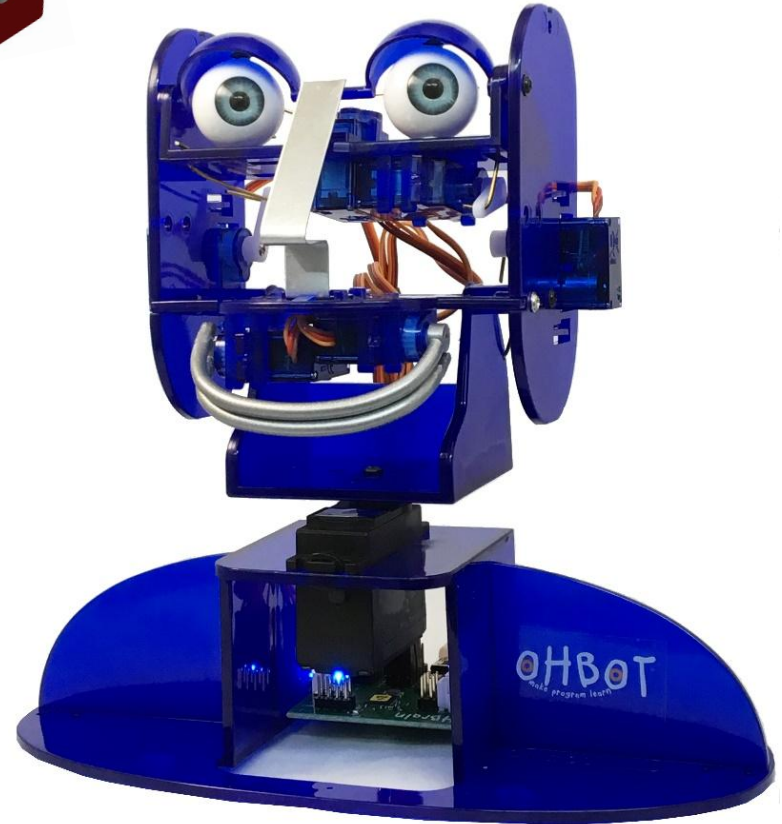
How many possible outcomes can you have with a dice? How many if commands will you need?



Extension 1 Example



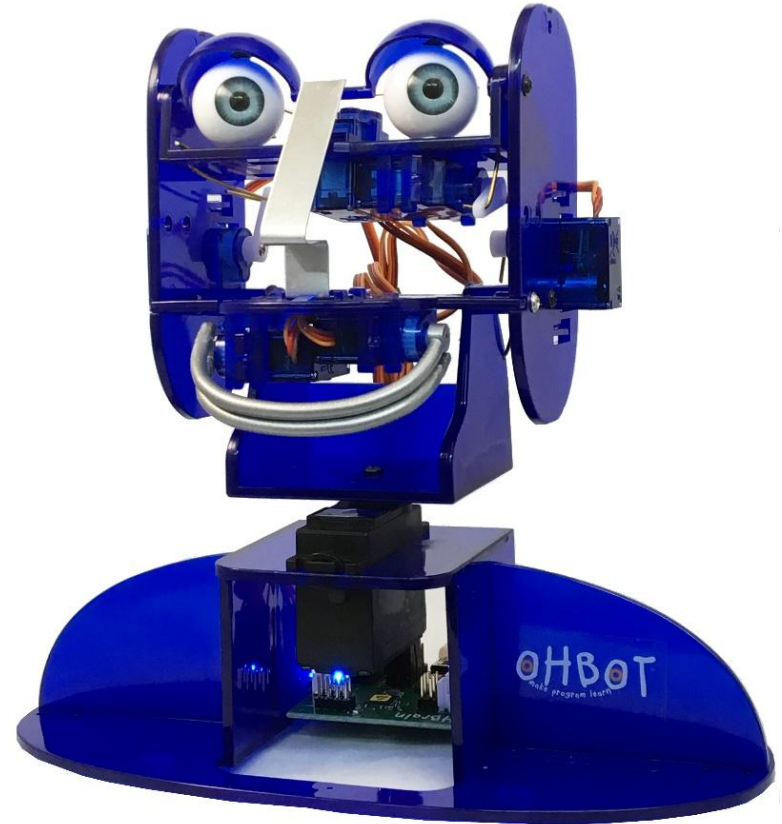
```
when clicked
ask "What score did you roll on your dice?" and wait
wait 2 secs
if answer = 1 then
say "what a shame. That is a low score."
if answer = 2 then
say "A couple scored."
if answer = 3 then
say "Half of the max."
if answer = 4 then
say "Not bad."
if answer = 5 then
say "Good score."
if answer = 6 then
say "Top score! You get to roll again."
```





Extension 2

Can you make Ohbot generate a random dice score between 1 and 6?



Extension 2 Example



Score on dice: 4.0

```
when clicked
  set Score on dice to 0
  wait .5 secs
  set Score on dice to round pick random 1 to 6
  if Score on dice = 1 then
    say what a shame. That is a low score.
  if Score on dice = 2 then
    say A couple scored.
  if Score on dice = 3 then
    say Half of the max.
  if Score on dice = 4 then
    say Not bad.
  if Score on dice = 5 then
    say Good score.
  if Score on dice = 6 then
    say Top score! You get to roll again.
```

