

# Condition Starts Action

V2

Online or  
Face to face

Supported by

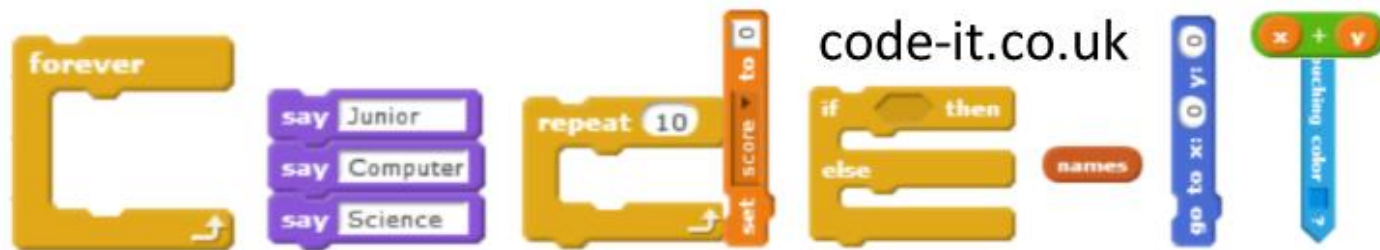


By Phil Bagge

[HIAS](#) Computing  
Inspector / Advisor

[CAS](#) Community Leader

Author of the  
[code-it](#) resources



# Everyday condition starts action

If you are cheeky

I am taking away your Gameboy

Have you every heard these types of conditions

If you do not finish your work

You will have to stay in and finish it at break time

# Everyday condition starts action

If you do that once more  
I am taking away your Gameboy

Tell your partner  
about any you  
have heard

If you do not finish that work  
You will have to stay in and finish it at break time

Condition starts action

If you are hungry  
put your hand up

One part in a condition

One part is an action or actions

Condition starts action

If you are hungry  
put your hand up

Can you roleplay  
this everyday  
algorithm?

Condition starts action

If you are hungry

 put your hand up

The action is  
indented to show  
that it only happens  
if the condition is  
met

Condition starts action

Smile

Frown

If you like cooking

wave your hand once

Tap head once

Act out this  
everyday  
algorithm?

Condition starts action

Smile

Frown

If you like cooking

wave your hand once

Tap head once

What actions are affected by the condition

What actions are **not** affected by the condition



# Condition starts action

Smile

Frown

If you like cooking

wave your hand once

Tap head once

What actions are affected by the condition


What actions are **not** affected by the condition

# Condition starts actions

If you are hungry  
    put your hand up

If you like computing  
    smile

If you are 8 or older  
    Stand  
    Sit



Now write your own everyday algorithm that uses condition starts action

Can your neighbour act it out?

One mark if it makes sense  
One mark if each section is on a new line  
One mark if you indent the actions

# Condition starts action flow of control

1 Smile

2 Frown

3 If you like cooking

3a wave your hand once

4 Tap head once

The flow of control is  
the order the  
instructions happen

Might happen and might not  
depending on if you like  
cooking or not!

Condition starts action flow of control

Smile

Frown

If you like cooking

wave your hand once

Tap head once

How many times  
is the condition  
checked?

Condition starts action flow of control

Smile

Frown

If you like cooking

wave your hand once

Tap head once

How many times  
is the condition  
checked?

Once Only

# Condition starts action flow of control

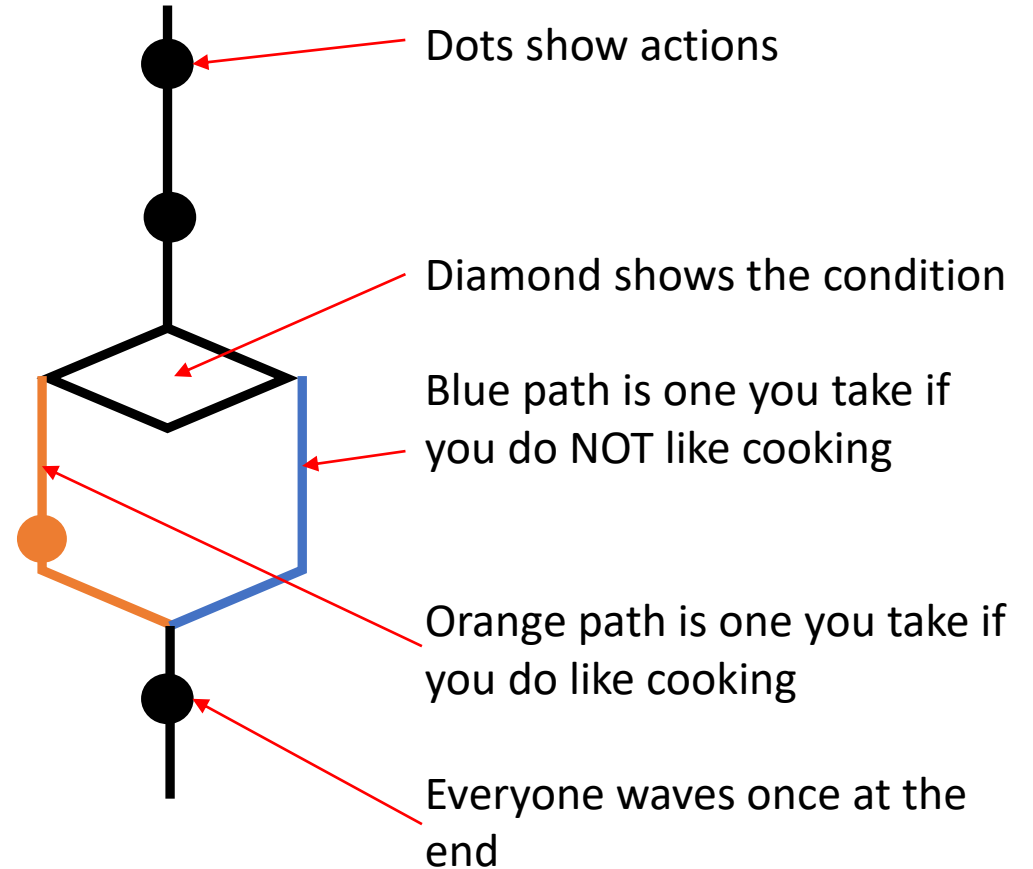
Smile

Frown

If you like cooking

wave your hand once

Tap head once



Condition starts action flow of control

Wave once

If you like programming

smile

tap head

Do 3 times

nod head

Act out this  
algorithm

# Condition starts action flow of control

Wave once

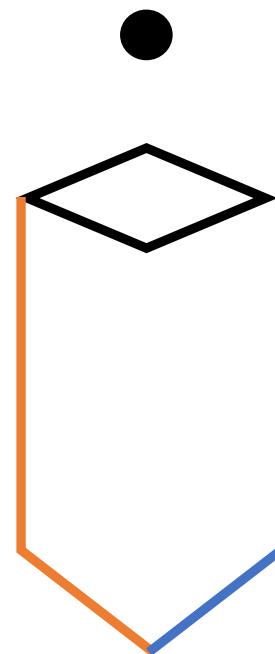
If you like programming

smile

tap head

Do 3 times

nod head



Draw the flow of control. Do not forget to draw the count controlled loop at the bottom



# Condition starts action flow of control

Wave once

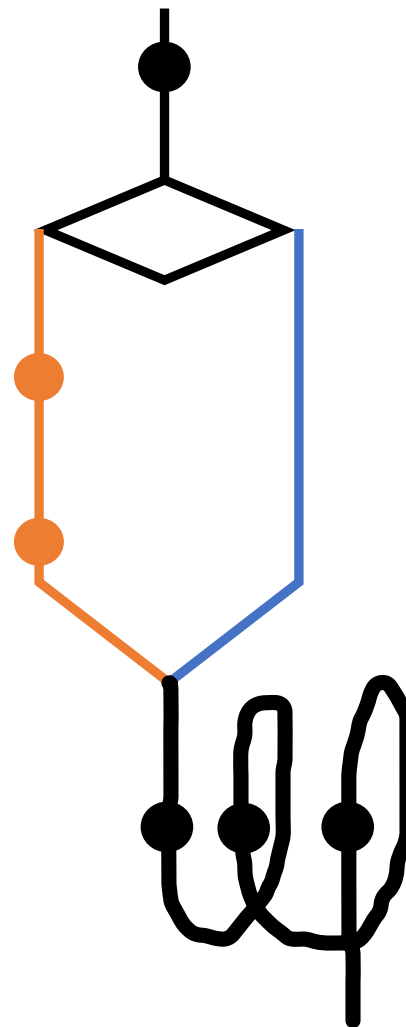
If you like programming

smile

tap head

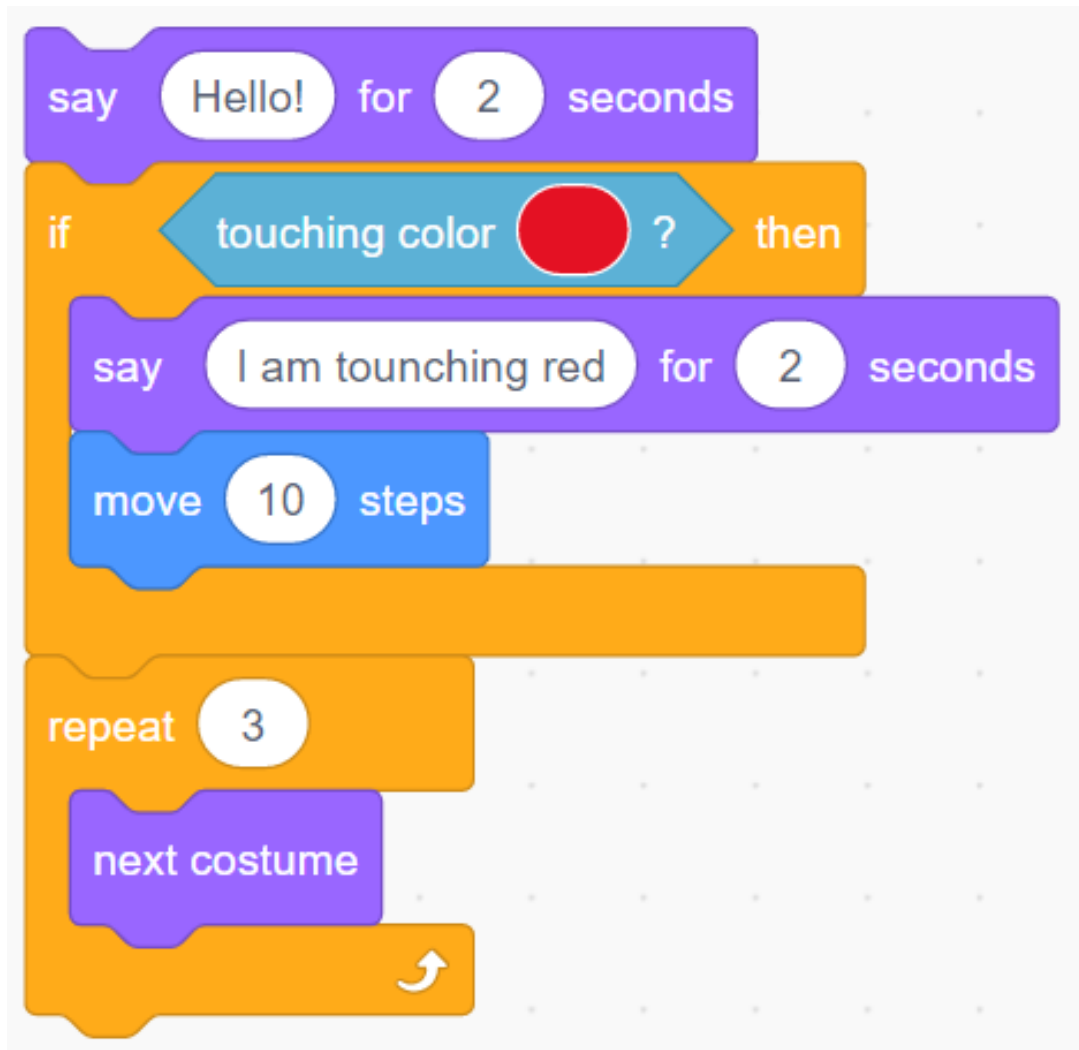
Do 3 times

nod head

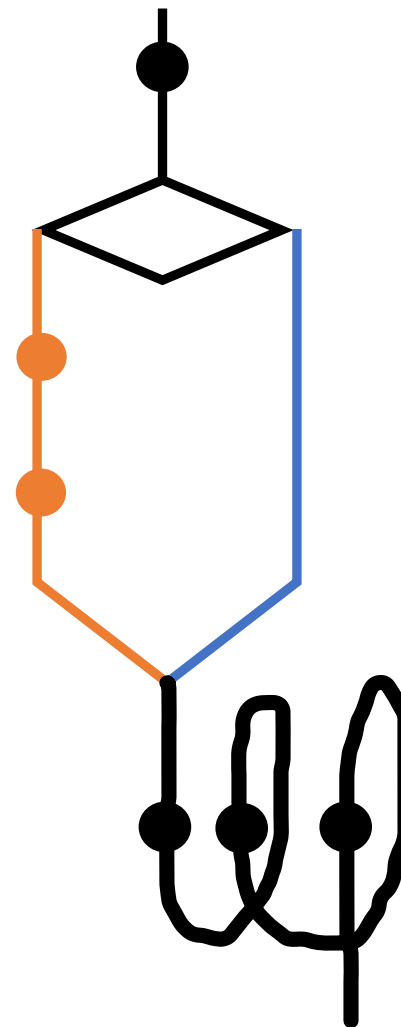


Did you include the action dots in the right places?

# Condition starts action in code



```
say Hello! for 2 seconds
if touching color red ? then
  say I am tounching red for 2 seconds
  move 10 steps
repeat 3
  next costume
```



# Computing Theory

- Developing key concepts before coding reduces cognitive load and develops an understanding separate from code making an idea more portable between algorithm and different programming languages.
- This resource has been developed for block based programming and you will notice that it often uses slightly different language from Scratch which helps pupils to develop an idea separate from code.
- Supporting Articles with research links
  - [Review of cognitive load theory for computing](#)
  - [Difference between algorithm and programming](#)
  - [Does writing algorithms improve pupils understanding of concepts?](#)
  - [Introducing variables to novice programmers](#)