Algorithm

When the broadcast play is received

Set the size of the dragon to 30%

Make the dragon move to the location x:-170 y:0

Show the dragon so that the player can now see him on the screen

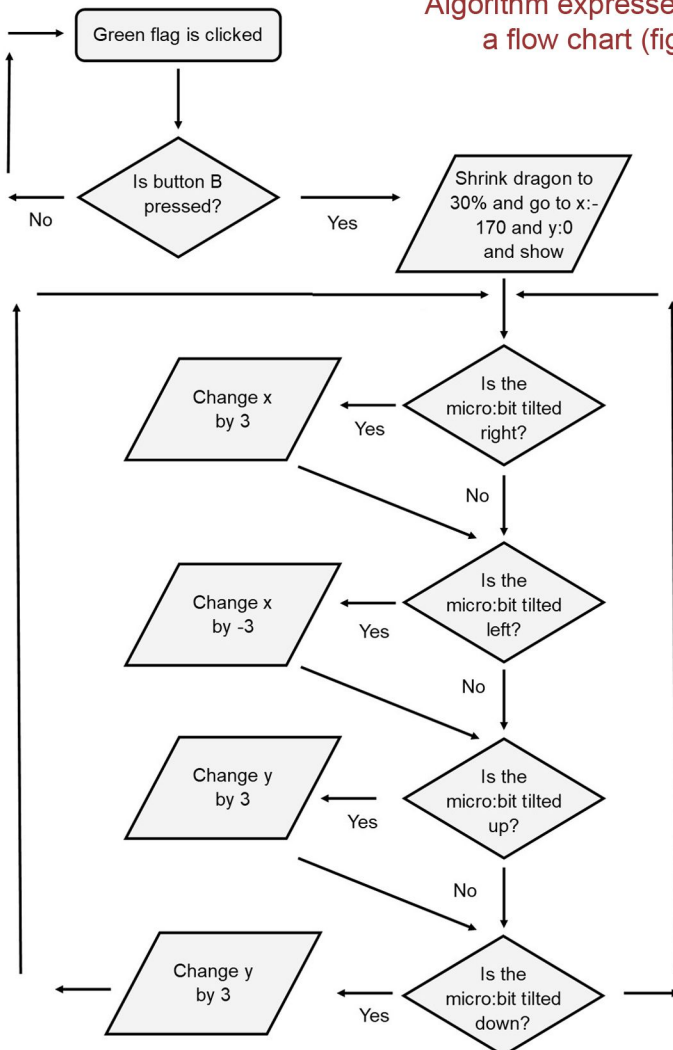If the player tilts the micro:bit to the right, change the dragons x position by 3

If the player tilts the micro:bit to the left, change the dragons x position by -3

If the player tilts the micro:bit to up, change the dragons y position by 3

If the player tilts the micro:bit to down, change the dragons y position by -3

Repeat this process

Algorithm expressed as a flow chart (fig 1.2)

Scratch code (fig 1.3)

```
when I receive play
set size to 30 %
go to x: -170 y: 0
show
forever
    if < tilted right ? > then
        change x by 3
    if < tilted left ? > then
        change x by -3
    if < tilted up ? > then
        change y by 3
    if < tilted down ? > then
        change y by -3
```

Flow chart elements:

- Green flag is clicked
- Is button B pressed? — No (loops back), Yes → Shrink dragon to 30% and go to x:-170 and y:0 and show
- Is the micro:bit tilted right? — Yes → Change x by 3 ; No ↓
- Is the micro:bit tilted left? — Yes → Change x by -3 ; No ↓
- Is the micro:bit tilted up? — Yes → Change y by 3 ; No ↓
- Is the micro:bit tilted down? — Yes → Change y by 3