

Exercise 4

1

- What three colours can combine to make any colour in a Sparkle?
- Which output must the Sparkles be plugged into?
- What are the three colour values required for full brightness white light?

For each of these programs:

- What is wrong?
- What effect will it have?
- How can you correct it?



2

This program should slowly increase the brightness of the sparkles from off to full white.

```

program start
do forever
  let r = 0
  let g = 0
  let b = 0
  set all sparkles to r g b
  wait 1 seconds
  increase r by 10
  increase g by 10
  increase b by 10
loop
  
```

3

This program should make the sparkles a brighter red every time the switch (connected to A) is pressed and released.

```

program start
let r = 0
let g = 0
let b = 0
do forever
  if A is HI then
    increase r by 10
    set all sparkles to r g b
  end if
loop
  
```