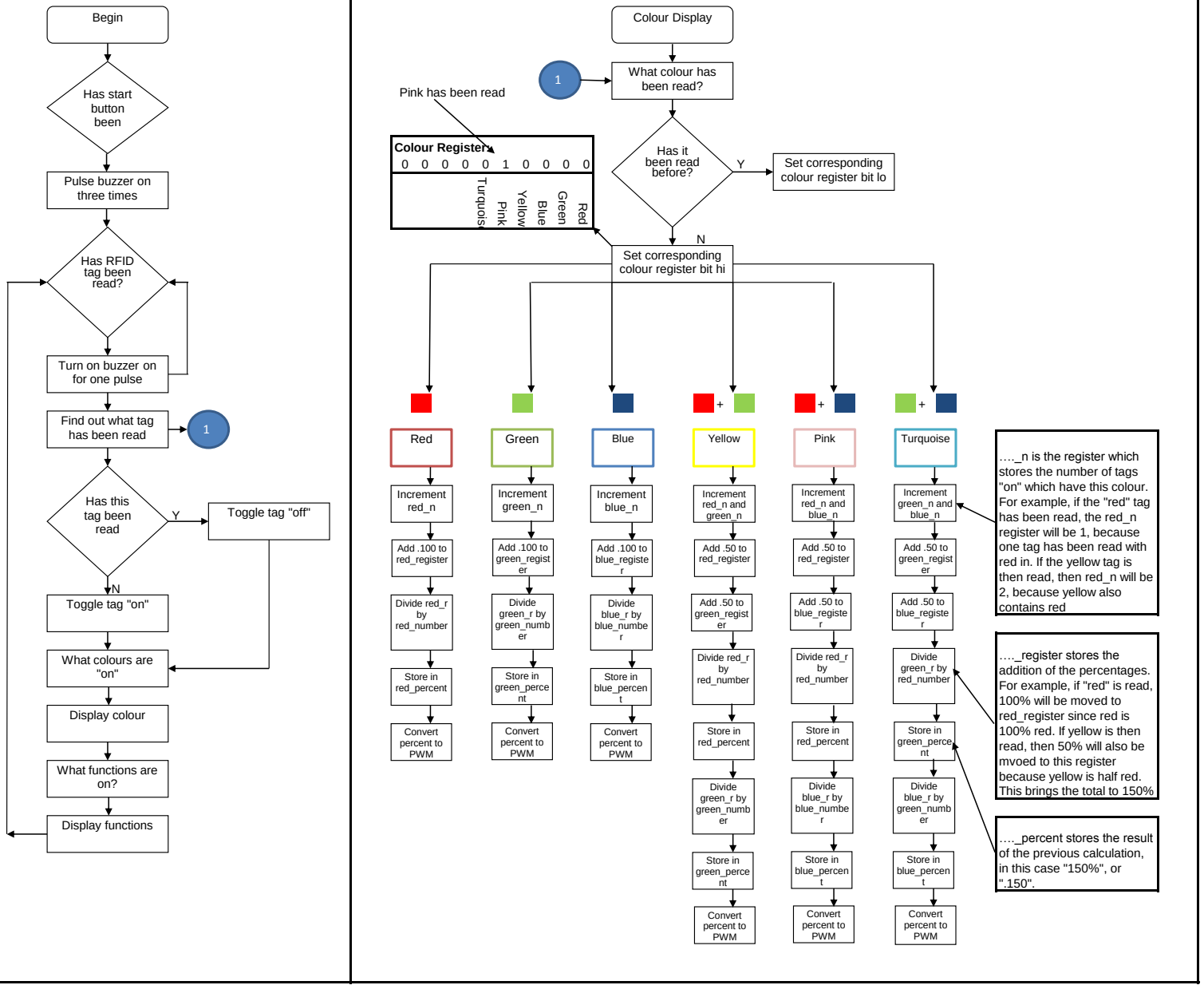
Begin
Has start button been
Pulse buzzer on three times
Has RFID tag been read?
Turn on buzzer on for one pulse
Find out what tag has been read
1
Has this tag been read
Y
Toggle tag "off"
N
Toggle tag "on"
What colours are "on"
Display colour
What functions are on?
Display functions
Colour Display
1
What colour has been read?
Pink has been read
Colour Register
0 0 0 0 0 1 0 0 0 0
Turquois
Pink
Yellow
Blue
Green
Red
Has it been read before?
Y
Set corresponding colour register bit lo
N
Set corresponding colour register bit hi
Red
Green
Blue
Yellow
Pink
Turquoise
Increment red_n
Add .100 to red_register
Divide red_r by red_number
Store in red_percent
Convert percent to PWM
Increment green_n
Add .100 to green_register
Divide green_r by green_number
Store in green_percent
Convert percent to PWM
Increment blue_n
Add .100 to blue_register
Divide blue_r by blue_number
Store in blue_percent
Convert percent to PWM
Increment red_n and green_n
Add .50 to red_register
Add .50 to green_register
Divide red_r by red_number
Store in red_percent
Divide green_r by green_number
Store in green_percent
Convert percent to PWM
Increment red_n and blue_n
Add .50 to red_register
Add .50 to blue_register
Divide red_r by red_number
Store in red_percent
Divide blue_r by blue_number
Store in blue_percent
Convert percent to PWM
Increment green_n and blue_n
Add .50 to green_register
Add .50 to blue_register
Divide green_r by red_number
Store in green_percent
Divide blue_r by green_number
Store in blue_percent
Convert percent to PWM
…._n is the register which stores the number of tags "on" which have this colour. For example, if the "red" tag has been read, the red_n register will be 1, because one tag has been read with red in. If the yellow tag is then read, then red_n will be 2, because yellow also contains red
…._register stores the addition of the percentages. For example, if "red" is read, 100% will be moved to red_register since red is 100% red. If yellow is then read, then 50% will also be mvoed to this register because yellow is half red. This brings the total to 150%
…._percent stores the result of the previous calculation, in this case "150%", or ".150".