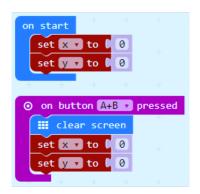
Picture Painter

Basic - MakeCode



This program needs to keep track of x and y coordinates, so create two variables, and use the start event to set them to 0 (MakeCode sets all new variables to 0 anyway, but it's good practice to initialise your variables).

We'll make the A+B button press a reset switch, so do it here too.

Remember you can find **clear screen** in Basic -> ... More

```
⊙ on button B ▼ pressed
⊙ on button A ▼ pressed
 o plot x (x y y (y v
                               o unplot x x y y y
 then
                               then
       change x v by
                                    change x by
      set x v to 0
                                    set x v to 0
 else
       change y v by 1
                                    change y by 1
                                       (y > > (4)
         (y > > (4)
                                    set y v to 0
```

The two button pressed are almost identical, except A will turn its LED on, and B will turn it off.

We could just get B to advance the coordinates, but this method is useful if we wrap around our picture and want to edit it rather than start again.

Set or unset the LED, and then advance the coordinates, wrapping x or y back to 0 where necessary.

This works ok, but if we're using the B button a lot it becomes hard to figure out which pixel we're up to.

Putting this into our forever loop will just flash the current pixel's LED.

If doing this with students I would get them to realise this and propose solutions themselves.