Design brief

You parents have said you can have some friends over as long as your big brother is watching and can tell them exactly how many of your friends are in the house. However, your big brother is extremely lazy and says he will only help if you make it easy for him. So you decide to make a simple counter using a micro:bit so he can count the visitors as they come and go.

IPO Table

Inputs	Processing	Outputs
Button A Button B Button Shake	ASSIGN counter 0 LOOP: GET button A decrement counter by 1 GET button B increment counter by 1 GET shake Assign counter 0 PUT counter to LED array	Display counter

Pseudocode

SET counter to zero

LISTEN

      IF button A

            INCREMENT counter one

      IF button B and IF counter greater than 0

            DECREMENT counter one

      IF shake

            SET counter to zero

LOOP FOREVER

      DISPLAY counter to led array