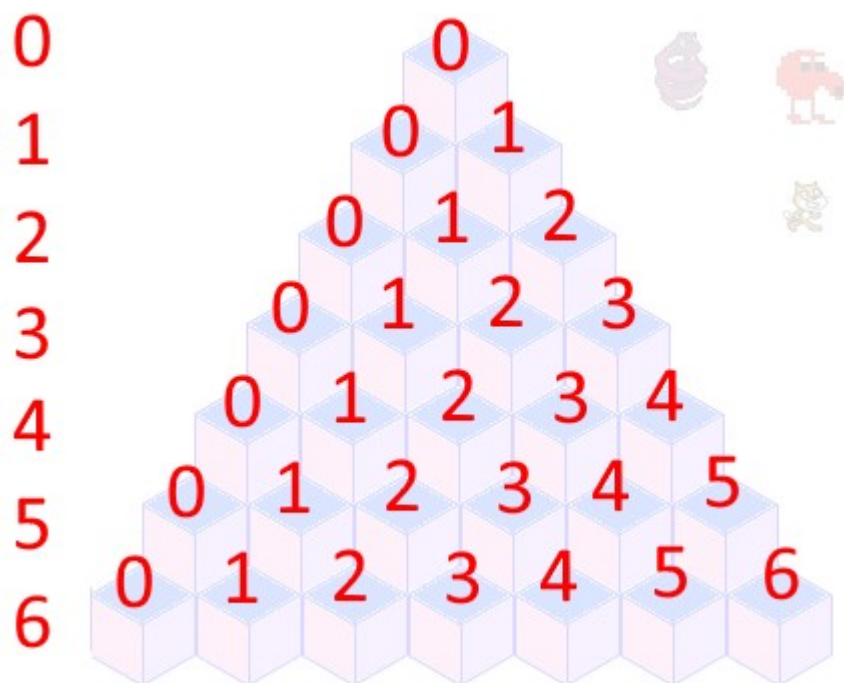
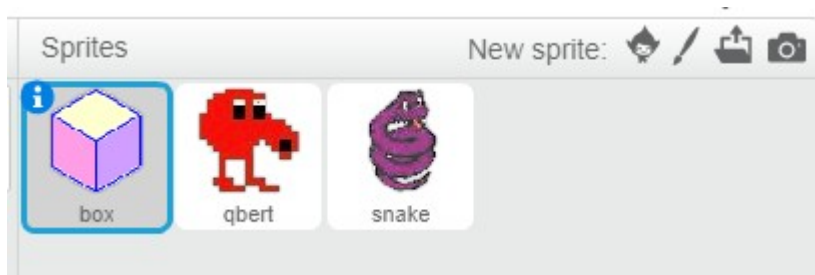


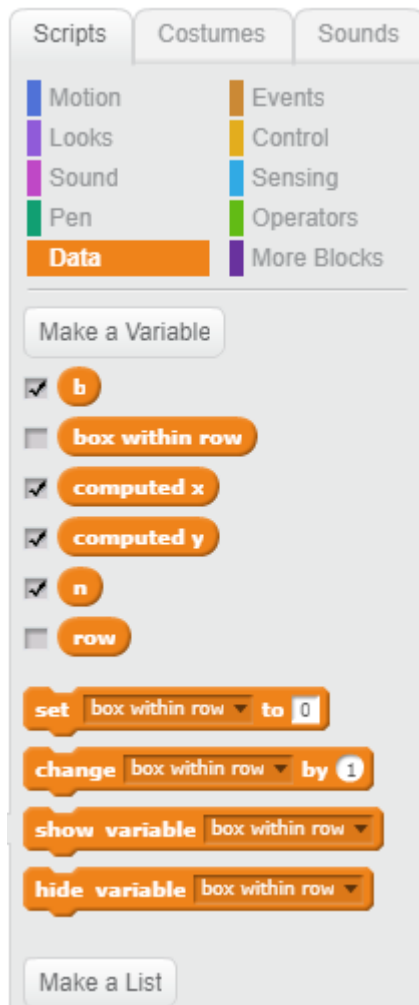
The numbering of the board boxes.



Make sure you are working with the box sprite.



Create the variables. Create all variables “for all sprites”.



The box scripts.

The image displays a collection of Scratch code blocks for a box script. The script begins with a 'when clicked' event block, followed by 'hide' and 'MakeBoard' blocks. The 'MakeBoard' block is a function that sets a variable 'n' to 0 and repeats a loop 7 times. Inside this loop, it calls the 'MakeRow' function and increments 'n' by 1. The 'MakeRow' function is another function that takes a parameter 'r', sets a variable 'b' to 0, and repeats a loop 'r + 1' times. Inside this loop, it calls the 'Compute Coordinates' function, moves to the computed x and y coordinates, creates a clone of itself, and increments 'b' by 1. The 'Compute Coordinates' function takes parameters 'row' and 'box within row' and calculates 'computed x' as  $row * -26.5 + box\ within\ row * 53$  and 'computed y' as  $130 - row * 45$ . After calculating the coordinates, it broadcasts a 'spin' message. The 'spin' message is received by three different scripts: one that broadcasts 'say x', one that says 'x position', and one that repeats a loop 36 times, turning 10 degrees.

```
when clicked clicked
hide
MakeBoard

define MakeBoard
set n to 0
repeat 7
  MakeRow n
  change n by 1

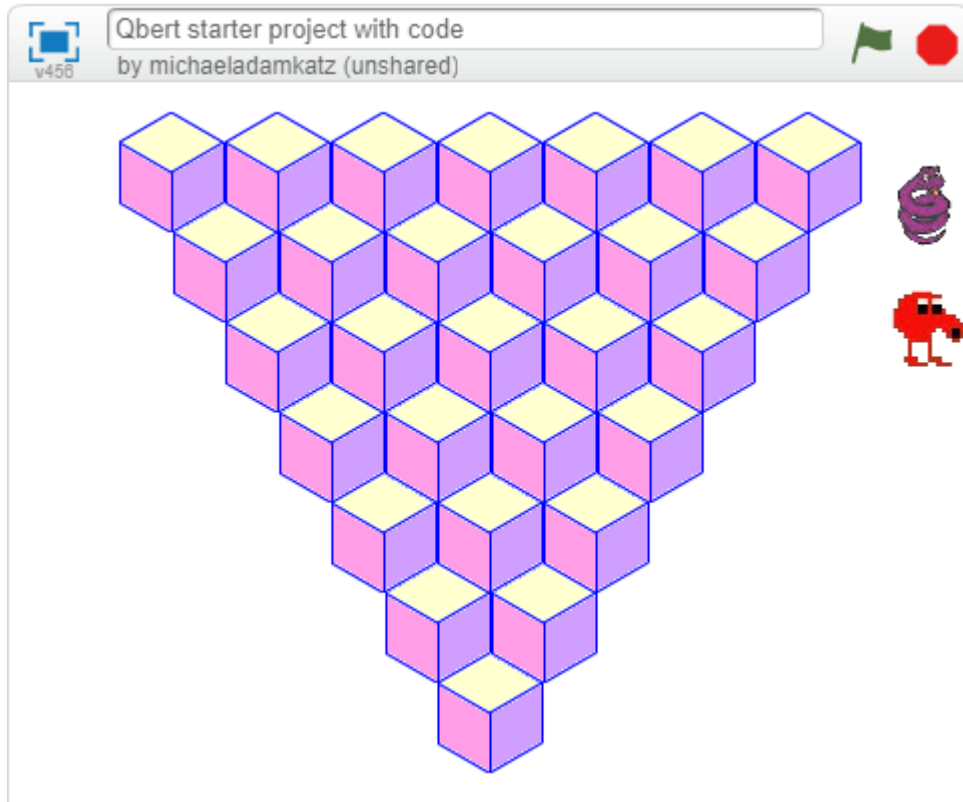
define MakeRow r
set b to 0
repeat r + 1
  Compute Coordinates r b
  go to x: computed x y: computed y
  create clone of myself
  change b by 1

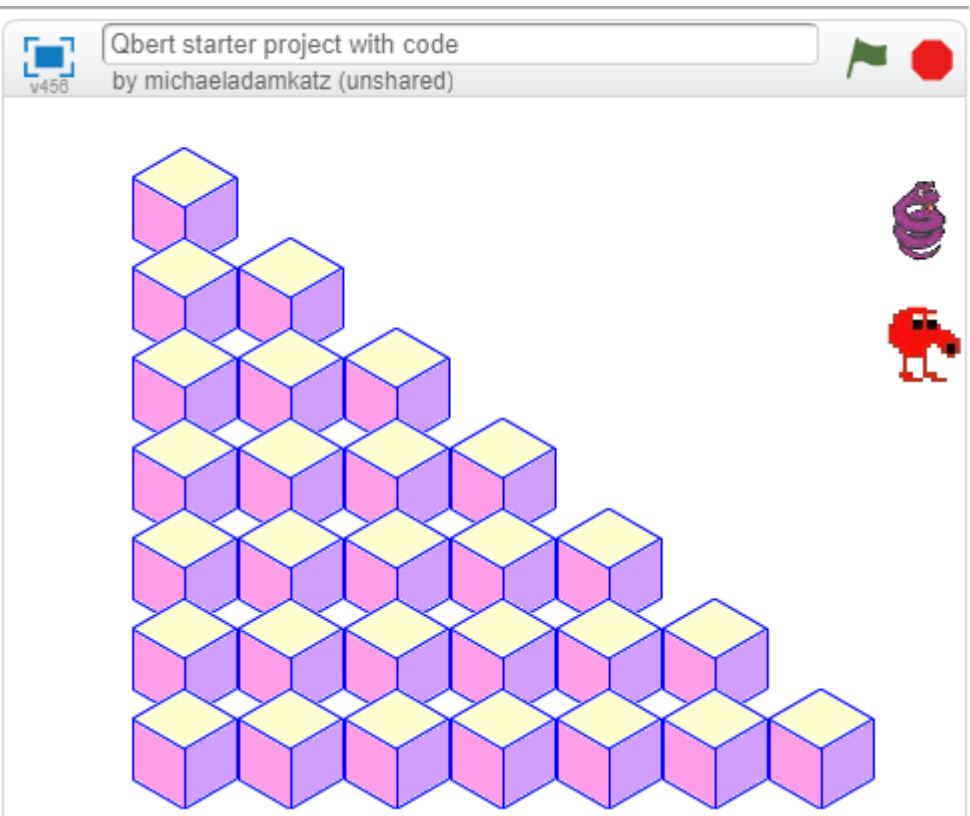
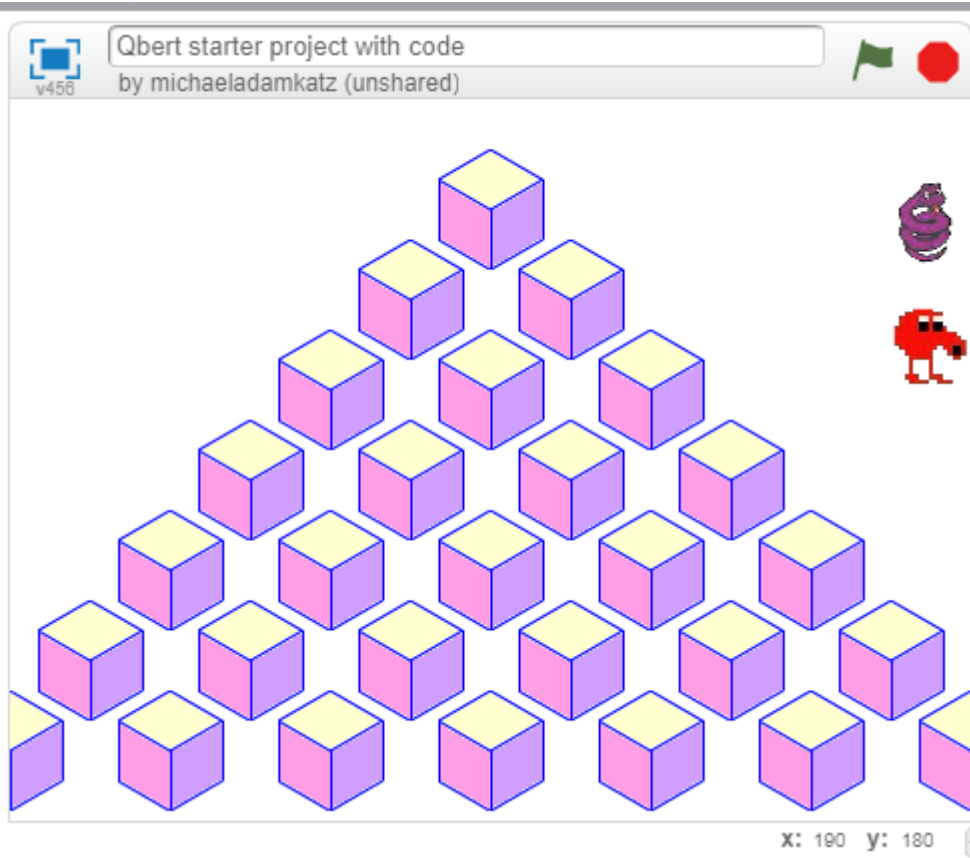
define Compute Coordinates row box within row
set computed x to row * -26.5 + box within row * 53
set computed y to 130 - row * 45
broadcast spin

broadcast say x
when I receive say x
say x position

when I receive spin
repeat 36
  turn 10 degrees
```

Challenges: By modifying just the “Compute Coordinates” function, make the board look like each of these pictures:







Qbert starter project with code  
by michaeladamkatz (unshared)

