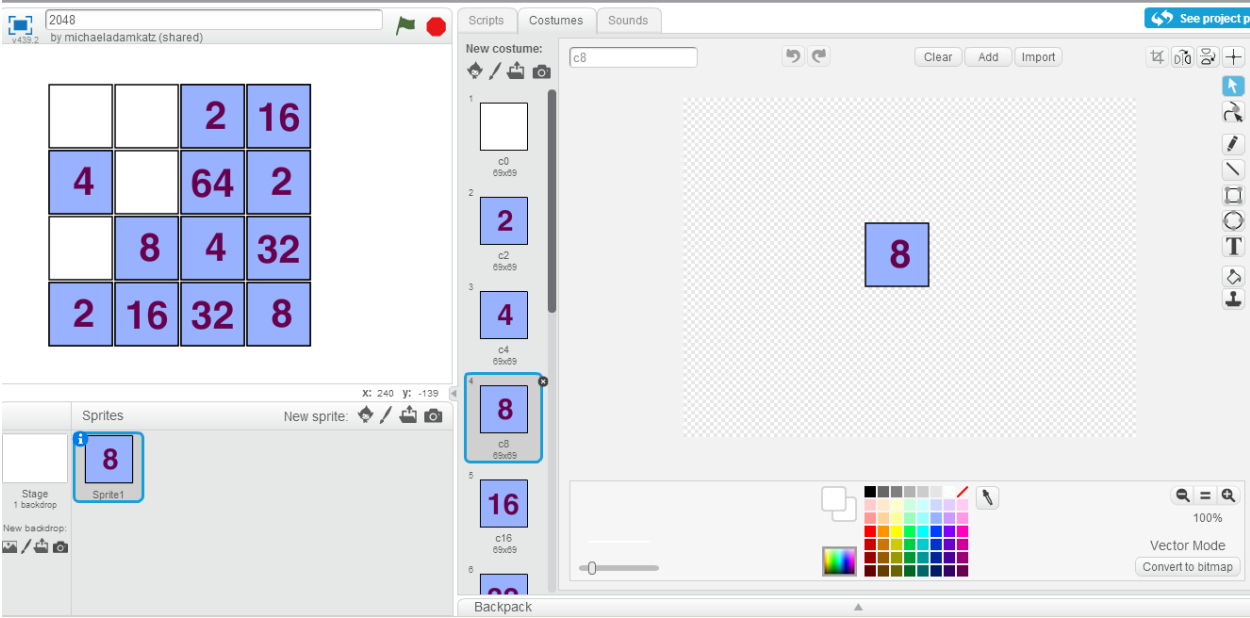
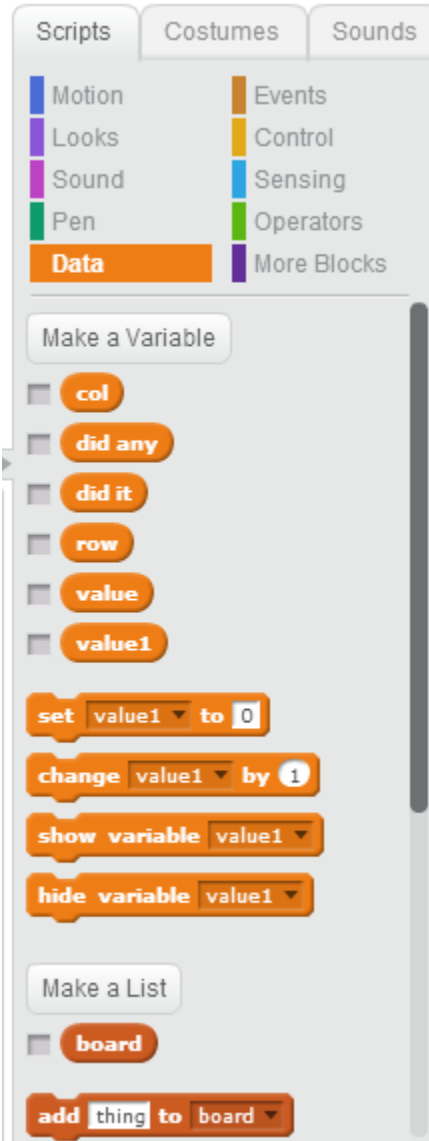


The costumes are named c0 (the white one), c2, c4, c8, and so on, up to c2048. You can make the different costumes different colors as in the real game.



Six regular variables and one list variable.



```

when clicked
  hide
  delete all of board
  repeat 16
    add 0 to board
  add 0 to board
  AddRandom 2
  AddRandom 2
  DrawBoard

define AddRandom v
  forever
    set col to pick random 1 to 4
    set row to pick random 1 to 4
    set did it to 0
    TrySetRandom col row v
    if did it = 1 then
      stop this script

define TrySetRandom c r v
  GetBoardValue c r
  if value = 0 then
    SetBoardValue c r v
    set did it to 1
  
```

8  
x: 70  
y: -12

```

define GetBoardValue c r
  set value to item (c - 1 * 4 + r) of board

define SetBoardValue c r v
  replace item (c - 1 * 4 + r) of board with v
  
```

```
define TryMove dx dy
  set did any to 0
  forever
    set did it to 0
    TryMoveOnce dx dy
    if did it = 0 then
      if did any = 1 then
        AddRandom pick random 1 to 2 * 2
      DrawBoard
      stop this script
    set did any to 1

when left arrow key pressed
  TryMove -1 0

when right arrow key pressed
  TryMove 1 0

when up arrow key pressed
  TryMove 0 -1

when down arrow key pressed
  TryMove 0 1
```

```
define TryMoveOnce dx dy
  set col to 1
  repeat 4
    set row to 1
    repeat 4
      TryMoveOnceAtLocation col row dx dy
      change row by 1
    change col by 1
```

```
define TryMoveOnceAtLocation c r dx dy
  GetBoardValue c r
  if value = 0 then
    stop this script
  if c + dx < 1 or c + dx > 4 or r + dy < 1 or r + dy > 4 then
    stop this script
  set value1 to value
  GetBoardValue c + dx r + dy
  if value = 0 then
    SetBoardValue c r 0
    SetBoardValue c + dx r + dy value1
    set did it to 1
  else
    if value > 0 and value = value1 then
      SetBoardValue c r 0
      SetBoardValue c + dx r + dy value1 * -2
      set did it to 1
```

```
define DrawBoard
  clear
  set col to 1
  repeat 4
    set row to 1
    repeat 4
      go to x:  $-210 + \text{col} * 70$  y:  $160 - \text{row} * 70$ 
      switch costume to c0
      stamp
      GetBoardValue col row
      set value to abs of value
      SetBoardValue col row value
      if not value = 0 then
        switch costume to join c value
        stamp
      change row by 1
    change col by 1
```