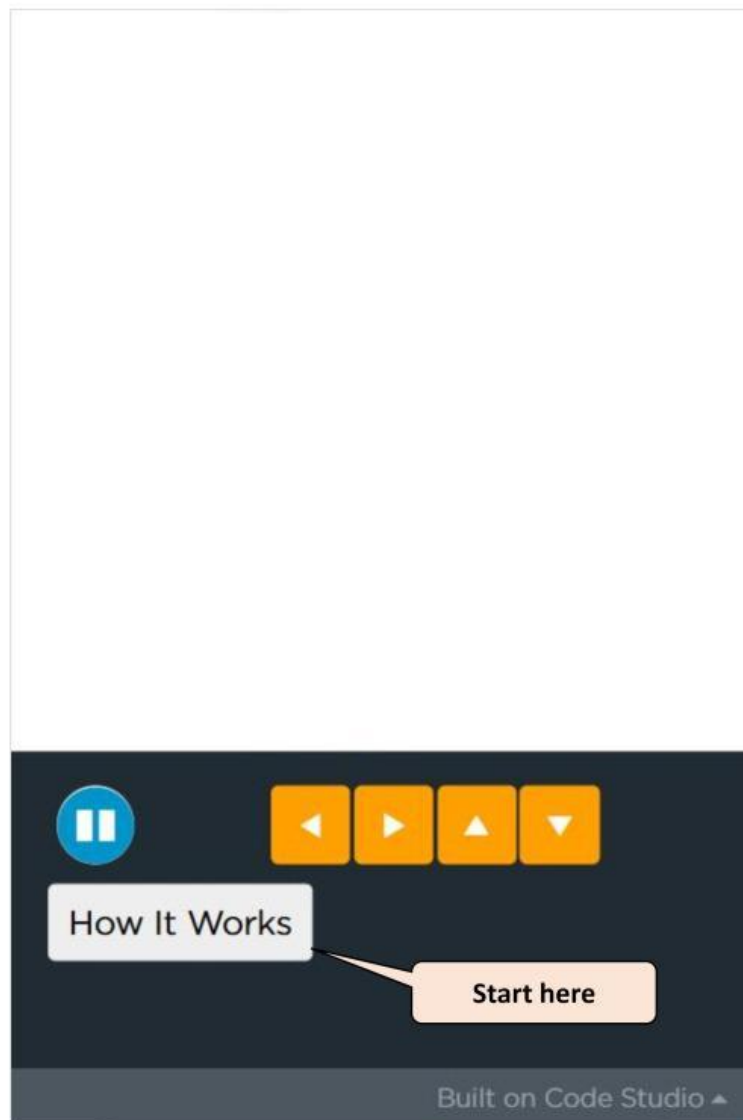


# Project 54



## Coding School



- ❖ Let's create circle patterns.

For this, let's place the artist first. Use the "Jump to over down" block to position X=10 and Y=10.

jump to 10 over 10 down

- ❖ First, let's make  $\frac{1}{4}$  of the screen black. For that, first use the "set width" block to set the size of the brush to 45. Then, use the "move forward" block to move forward 188 pixels, turn 90 degrees to the right, and move forward again. Move 10 pixels and turn left by 90 degrees and move back 188 pixels. Use the "repeat do" block to repeat the process 20 times

```
repeat 20 times
do
  set width 45
  move forward by 188 pixels
  turn right by 90 degrees
  move forward by 10 pixels
  turn left by 90 degrees
  move backward by 188 pixels
```

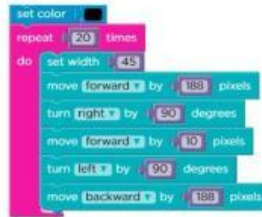
- ❖ Let's make another  $\frac{1}{4}$  of the screen blue. Use the "set color" block and select the color blue. Adjust the size of the brush to 45 using the "set width" block. Then, use the "move forward" block to move forward 190 pixels, turn right by 90 degrees, move forward again by 10 pixels, turn left by 90 degrees, and move back 190 pixels. Use the "repeat do" block to repeat the process 20 times.

```
set color blue
repeat 20 times
do
  set width 45
  move forward by 190 pixels
  turn right by 90 degrees
  move forward by 10 pixels
  turn left by 90 degrees
  move backward by 190 pixels
```

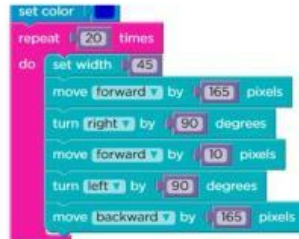
- ❖ Then the artist should be repositioned to color the remaining  $\frac{1}{2}$  of the screen. For that, first use the "jump to over down" block and place the Artist so that X= 400 and Y = 400 and turn right by 180 degrees. For that, use the following blocks

```
jump to 400 over 400 down
turn right by 180 degrees
```

- ❖ Apply blocks as follows to make another  $\frac{1}{4}$  of the screen black.



- ❖ Apply blocks as follows to make the remaining  $\frac{1}{4}$  of the screen blue.



- ❖ Adjust the size of the brush to 5 and use the "jump to over down" block to position X= 90 and Y= 90 and use the "set color" block to select the yellow color. For that use blocks as below.



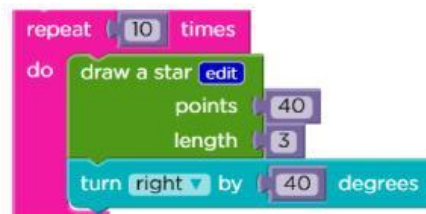
- ❖ Then let's create the pattern. First, for the "draw a star" block, give 40 to the points and 3 to the length, and turn the artist 40 degrees to the right. For that, apply the blocks as follows.



- ❖ Then the artist should be repositioned to create the other pattern. Let's use the "jump to over down" block for that. Give x and y values to this block where Artist should be positioned. (300,90)



- ❖ Create the pattern using the "draw a star" block as before.



- ❖ To create the third pattern, again use the "jump to over down" block and place the Artist as in the block below

jump to 300 over 300 down

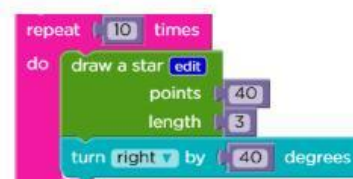
- ❖ Create the pattern using the "draw a star" block as before.



- ❖ Again use the "jump to over down" block and install the Artist as in the block below.

jump to 90 over 300 down

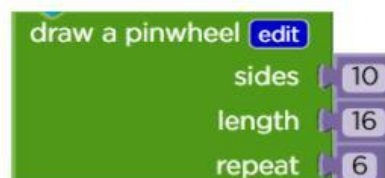
- ❖ Create the pattern using the "draw a star" block as before.



- ❖ To create another pattern in the center of the screen, position the artist as follows.

jump to 200 over 200 down

- ❖ Create the pattern like the one below. Use the "draw a pinwheel" block for that.



- ❖ Take the artist to the upper left corner of the screen by the "Jump to position" block. Use the value "top left" for this.

jump to the top left position

Select the correct answer.

1. move forward by 188 pixels What does this block do?

Moves 188 pixels forward.

Moves back 188 pixels.

Jumps forward 188 pixels.



2.  What does this block do??

Moves back 90 pixels.  
90 moves forward.  
Turns 90 degrees to the left.

3.  What blocks are needed to create this?

