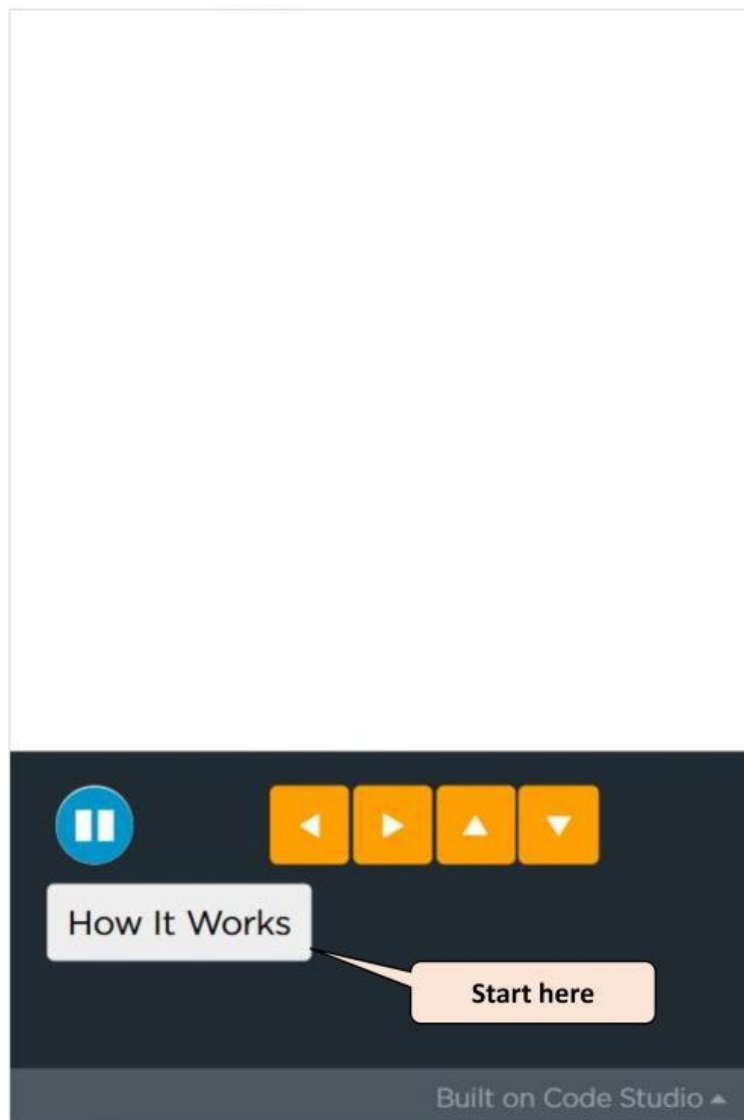


# Project 55



## Coding School



Let's create a Buddha gathering ring.

- ❖ For this, let's place the artist first. Use the "Jump to over down" block to position X=0 and Y=0.

jump to 0 over 0 down

- ❖ First, let's make the whole screen black. For that, set the size of the brush to 45 using the "set width" block. Then, use the "move forward" block to move forward 375 pixels, turn right by 90 degrees and move forward 20 pixels again. Move 90 degrees to the left and move back 375 pixels. Use the "repeat do" block to repeat the process 20 times.

```
repeat 20 times
do
  set width 45
  move forward by 375 pixels
  turn right by 90 degrees
  move forward by 20 pixels
  turn left by 90 degrees
  move backward by 375 pixels
```

- ❖ Using the "Jump to over down" block, position the artist so that X=200 and Y=200 and set the size of the brush to 4.

jump to 200 over 200 down  
set width 4

- ❖ Choose the orange colour to create the final ring of the Buddhist ring. Use the "set colour" block for that.

set color

- ❖ Take the artist to the center of the screen using the "Jump to position" block to create the orange circle. For this, using the "middle center" value, the move forward block should move 180 pixels forward and turn left by 1 degree. By repeating these steps 360 times, a circle can be drawn. Since several steps are repeated, it is easier to put them in a for loop.

```
for 1 from 0 to 360 count by 1
  jump to the middle center position
  move forward by 180 pixels
  turn left by 1 degrees
```

- ❖ Then use the "set color" block as above to create the gathering ring in white color.

set color

- ❖ Take the artist to the center of the screen using the "Jump to position" block to create the white circle. For this, using the "middle center" value, the move forward block should move 155 pixels forward and turn left by 1 degree. By repeating these steps 360 times, a circle can be drawn.

```

for i from 0 to 360 count by 1
  jump to the middle center position
  move forward by 155 pixels
  turn left by 1 degrees

```

- ❖ To create the circle with red colour, take the artist in the middle of the screen as above. Then move forward 130 pixels and turn left by 1 degree. Complete the red circle using the for loop.

```

set color red
for i from 0 to 360 count by 1
  jump to the middle center position
  move forward by 130 pixels
  turn left by 1 degrees

```

- ❖ Take the artist to the center of the screen using the "Jump to position" block to create the yellow circle. For this, using the "middle center" value, the move forward block should move 105 pixels forward and turn left by 1 degree. Repeat these steps 360 times to create the yellow gathering ring.

```

set color yellow
for i from 0 to 360 count by 1
  jump to the middle center position
  move forward by 105 pixels
  turn left by 1 degrees

```

- ❖ In order to create the blue circle, the artist should use the "Jump to position" block to move to the middle of the screen using the value "middle center" and move forward 80 pixels by the move forward block and turn left by 1 degree. Repeat these steps 360 times to create the blue circle.

```

set color blue
for i from 0 to 360 count by 1
  jump to the middle center position
  move forward by 80 pixels
  turn left by 1 degrees

```

- ❖ 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

```

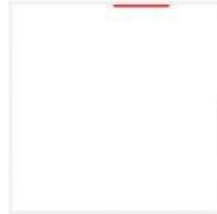
Select the correct answer

```

jump to the middle left position
set color to red
set width to 5
move forward by 100 pixels
  
```

1.

Select the design related to this block.



```

set color to red
set width to 5
move forward by 50 pixels
move forward by 50 pixels
turn left by 90 degrees
move forward by 50 pixels
turn left by 90 degrees
move forward by 100 pixels
turn left by 90 degrees
move forward by 50 pixels
turn left by 90 degrees
  
```

2.

Select the block set that can be used to get the same design as this block set.

```

set color to red
set width to 5
move forward by 200 pixels
turn left by 180 degrees
move forward by 100 pixels
turn left by 180 degrees
  
```

```

set color to red
set width to 5
repeat 2 times
do
move forward by 100 pixels
turn left by 90 degrees
move forward by 50 pixels
turn left by 90 degrees
  
```

```

set color to red
set width to 5
repeat 2 times
do
move forward by 100 pixels
turn left by 180 degrees
move forward by 50 pixels
turn left by 180 degrees
  
```

3.

```

jump to 100 over 150 down
  
```

What does this mean?

Artist jumps to X= 150 and Y= 100.

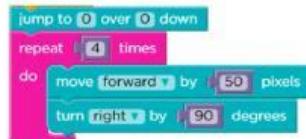
The artist jumps from position X=100 and Y=150

Artist jumps to X=100 and Y=150.





4. What blocks are needed to get a design like this image?



5. Select the block that will be used to increase the width of the lines that Artist will create.

