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DP EDUCATION Coding School
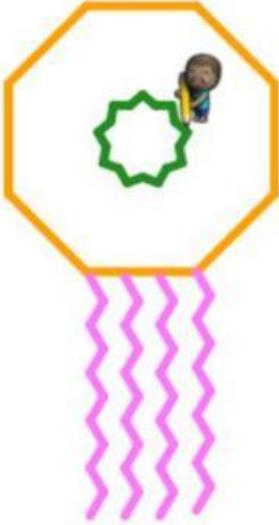
Run

How It Works

Start here

Built on Code Studio ▲

Let's create a Vesak Lanterns.

For this, let's first position the artist. Take the "Jump to position" block to the center of the screen. Use the value "middle center" for this.

❖ Choose orange color to create the surround of Vesak lantern. Use the "set color" block for that.

```
jump to the [middle center ▾] position
set color [ ]
```
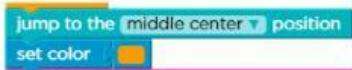
❖ Then turn 45 degrees to the left and move 60 pixels forward to create the hexagon. In this way, the artist has to walk 8 times to complete the hexagon by following the same steps again and again. Because the same steps are repeated, these blocks can be included in a for loop. The length of the loop is 8. Since the loop starts at 0, create it to loop until 7. The count should be one by one.

```
for [i ▾] from [0] to [7] count by [1]
    turn [left ▾] by [45] degrees
    move [forward ▾] by [60] pixels
```

❖ At the end of creating the hexagon the artist is facing east so he has to turn 120 degrees south to create the ripples of the Vesak lantern.

❖ Use the same blocks as above to make the waves pink.

❖ Before creating a wave, you must turn left 60 degrees and move forward 15 pixels, then turn left 60 degrees and move another 15 pixels.

```
turn [left ▾] by [60] degrees
move [forward ▾] by [15] pixels
turn [right ▾] by [60] degrees
move [forward ▾] by [15] pixels
```

❖ By repeating the above steps, a complete wave can be drawn. Since several steps are repeated, it is easier to put them in a for loop.

```
for [i ▾] from [0] to [4] count by [1]
    turn [left ▾] by [60] degrees
    move [forward ▾] by [15] pixels
    turn [right ▾] by [60] degrees
    move [forward ▾] by [15] pixels
```

❖ After that, the artist should be repositioned to create the other wave. Let's use the "jump to over down" block for that. Give x and y values to this block where Artist should be positioned. (180,203)

```
jump to [180] over [203] down
```
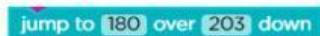
❖ Now draw the other wave again as above. For that also use the for loop as above.

❖ To create the remaining two waves, after positioning the artist correctly, create the waves as described above using the for loop.

```
jump to 161 over 203 down
for (i▼) from 0 to 4 count by 1
    turn left▼ by 60 degrees
    move forward▼ by 15 pixels
    turn right▼ by 60 degrees
    move forward▼ by 15 pixels
```
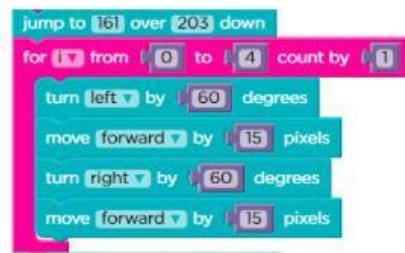
❖ Finally, the star-shaped koda in the middle of the Vesak lantern can be designed as follows.

❖ First use the following to make the star color green.

```
set color
```

❖ The artist must be repositioned to create the star. Let's use the "jump to over down" block for that. Give x and y values to this block where Artist should be positioned. (195,124)

```
jump to 195 over 124 down
```

❖ Get the draw a start block to create the star. Give 9 for its points and 9 for its length.

```
draw a star edit
        points 9
        length 9
```