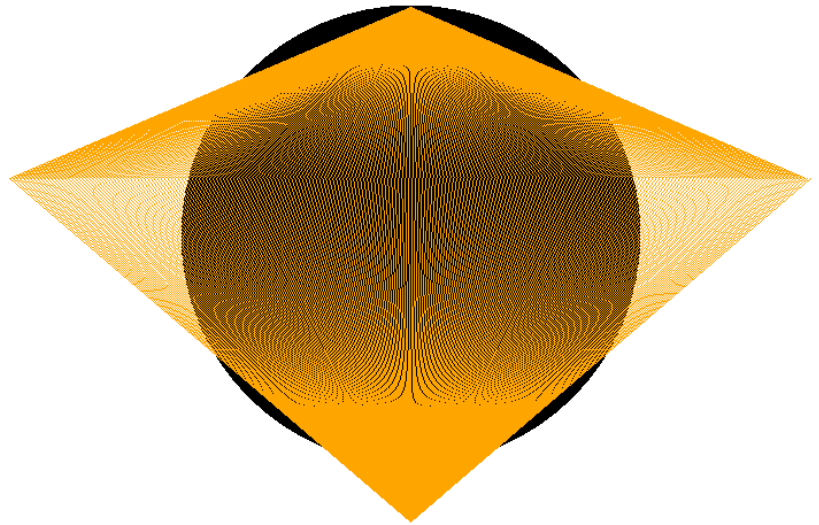


Get the `day28_starter_file.txt` from my web site. Paste it into a new Python file, save the file as `day28_HalloweenFace.py` on your Z: drive. Put your name in a comment at the top.

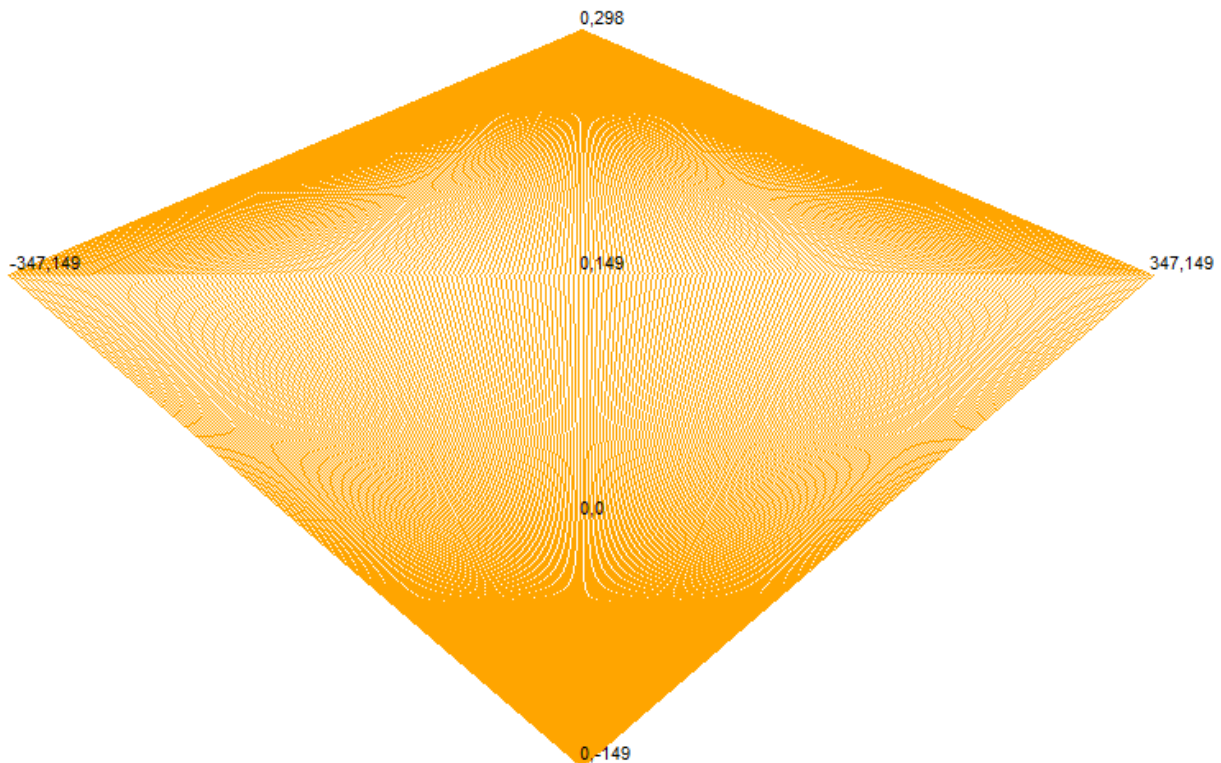
In this file I give you a template that draws this orange and black thing to the right:



Your task is to add elements to this that make it a cool Halloween face. Required: two eyes, a nose, and a mouth. Also required: creative use of color. Optional: make a cool background. I give you a sample on the next page.

You may notice the command `"tracer(0)"` at the top of the program. That makes the image draw instantly, so you don't have to wait around while your design draws. It's like setting the speed to some number that makes it instantly be done.

Here is the template with the coordinates of key spots printed out (minus the black circle background just to make the number more easily readable):



(continued on next page)

Below is our familiar list of useful turtle calls. If you want to do a shape that isn't a circle, you can consider using a thick line (set the pen width to be thick, then do a bunch of goto commands), or do a `begin_fill()`, then goto several points, ending where you started, then say `end_fill()` and the whole region will fill in with the colors you have chosen. That's how I did the mouth in my sample below.

Some useful turtle commands:

```
forward(distance)
backward(distance)
right(degrees)
left(degrees)
dot(size)          you can make dots larger by including a number, or leave blank
circle(r)          r is the radius of the circle
penup()            lifts up the imaginary pen that the turtle draws with
pendown()          puts the pen back down so you can draw
home()             goes back to the center of the screen
speed(n)           1 (slow) to 10 (faster), or 0, which makes turtle go the fastest
pensize(n)         sets line thickness
color("red")        or pink, or blue, yellow, etc., here is a list of all possible colors:
                   https://www.tcl.tk/man/tcl8.4/TkCmd/colors.htm
color("c1","c2")   giving two colors makes one the line and one the fill
begin_fill()       say begin_fill(), then do a bunch of stuff that includes overlapping lines,
                   then when you are done, do "end_fill()" to fill areas with color. See example
                   below.
end_fill()
goto(x,y)          Goes to the location (x,y) on the drawing board
write("text")      writes text on the screen. You can set the font using a call like this:
                   write("Mr. Hays",font=("Courier", 18, "normal"))
bgcolor("color")   Sets the whole window background color
```

Here is what I created below. Make yours better!

