We're going to make a cat that shoots lazers out of it's eyes when you press the space bar.

0. Start a new sketch with `setup()` and `draw()` methods.

1. Set the size of your sketch in the **setup** method.
```
size(width, height);
```

2. Drop the image of your cat onto your sketch. Load it like this in the **setup** method:
```
PImage catPic = loadImage("tabby.jpeg");
catPic.resize(width, height);  // to match your size
background(catPic);
```

3. Place an ellipse over one of the cat's eyes in the **draw** method.
```
ellipse(x, y, width, height)
```

4. Create variables for the x and y location of the ellipse. Put these variables at the top of your sketch, and use them in your ellipse command. Initialize them to the location of the cat's eye. Completing this step should not change the look of your sketch.

5. Give the ellipse a color with the `fill` command (this will be the color of the lazer).
```
fill(red, green, blue)
```

6. Add a `keyPressed()` method and increase the `x` and/or `y` variables inside it.
```
void keyPressed() {
    x++;
    y++;
}
```
This code will move the ellipse diagonally to the right. Choose the direction of the lazer beam depending on the direction your cat is facing. Remember you can also decrement `x` and `y`.

7. Adding `noStroke()` will make it look more like a lazer beam.

8. Accelerate the movement of the ellipse.
   8.1. Create a variable for `acceleration` next to your `x` and `y` variables.
   8.2. Instead of simply incrementing or decrementing `x` and `y`, use `acceleration` to increase their speed each time a key is pressed.
   e.g. `y-=2*acceleration;`
   8.3. Increment `acceleration` every time a key is pressed.

9. Make the cat shoot lazers from both eyes. Use an offset so that you don't need to make a second set of coordinates. e.g. `ellipse(x+220, y, 60, 50);`

10. Play a pew-pew sound when the lazer shoots.
   10.1. First download a sound from freesound.org and drop it onto your sketch.
   10.2. Put this at the top of your sketch.

```
import ddf.minim.*;
AudioSample sound;
```

   10.3. Load the sound in the **setup** method.

```
Minim minim = new Minim(this);
sound = minim.loadSample("pew-pew.wav");
```

   10.4. Play the sound when `acceleration == 1`.

```
sound.trigger();
```

11. Set the lazer back to the beginning when it goes off the screen.
   11.1. Write an `if` statement for when the lazer if off the screen. This might help:

```
println(x + ", " + y);
```

   11.2. When the lazer is off the screen, reset the cat image as the background.
   11.3. And set `x` and `y` back to their original values.
   11.4. And set `acceleration` back to 1.

12. Celebrate your amazing coding skills with some Cat Techno. Check out the Terminator Cat at 0:40!