

Homework #4 Practice

by da' Moose

Homework #4 requires you to write your own function definition - something about your initials. . .

For starters, let's write some practical code that you may find useful in the future. When we want to draw a circle or square, we have to provide four arguments:

```
ellipse( float x, float y, float wd, float ht )
```

```
draw( float x, float y, float wd, float ht )
```

but the values of `wd` and `ht` have the same values for a circle or square. Drawing one or two circles or squares is no big deal but what if Jim goes slightly crazy and requires 200 squares, 200 circles, and 200 circles inside squares. That would require us to type lotsa' extra arguments.

We can save some typing and work by defining three functions:

```
circle( float, float, float)
```

```
square( float, float, float)
```

```
circleInSquare( float, float, float);
```

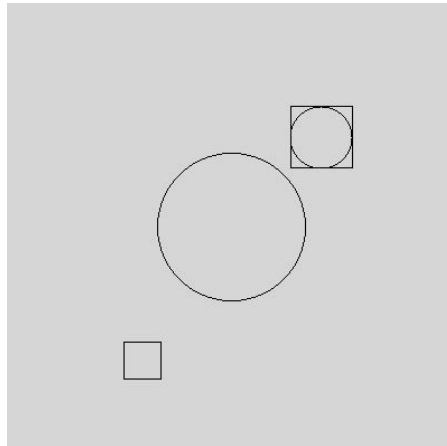
The first argument is the `x` value of the center of the circle and square

The second argument is the `y` value of the center of the circle and square.

The third argument is the `size` (diameter or edge) of the circle and square.

Write a program using the code on the next page. You have to finish the code by defining the three functions called in the `draw()` function.

Here is Jim's output for the finished version of this program:



```
void setup( )
{
  size( 400, 400 );
  rectMode( CENTER );
  noFill( ) ;
}

void draw( )
{
  circle( width/2, height/2, width*.33 );
  square( width*.3, height*.8, 33 );
  circleInSquare( width*.7, height*.3, 55 );
  saveFrame( "p4.jpg" );
  noLoop();
}

// define circle, square, and circleInSquare here
```