

Syntax Recap

- function declaration

```
// ...comments describing the function's job...
void functionName () {
    // ...statements in function body...
}
```
- function call

```
functionName();
```

Drawing Function Questions

- Am I drawing something complex (more than a few shapes)? → if so, create a drawing function
- drawing function definition
 - What is being drawn? → function name (and comments)
 - How is it drawn? → function body
- drawing function calls
 - When should the task be performed? → where to put the function call

At the End of Class

Hand in whatever you have done during class, even if a sketch is incomplete.

- Make sure each sketch is named as directed and has a comment with the names of your group. Also be sure to save your sketches! (in Linux, this should be in your sketchbook **~/cs120/sketchbook**)
- Copy the entire directory for each sketch (not only the .pde file) into your handin directory (**/classes/cs120/handin/username**). You only need to hand in one copy for the group. (If you are running Processing on your computer instead of using the Linux virtual desktop, you will need to use FileZilla to copy the sketches.)

Exercises

1. Create a new sketch called **sketch_240916a** and either copy and paste from the snowman sketch on the schedule page or type in the following code:

```
void setup () {  
  size(600,400);  
}  
  
void draw () {  
  background(100);  
  ellipseMode(CENTER);  
  fill(255);  
  stroke(0);  
  ellipse(300,325,150,150);  
  ellipse(300,200,100,100);  
  ellipse(300,125,50,50);  
}
```

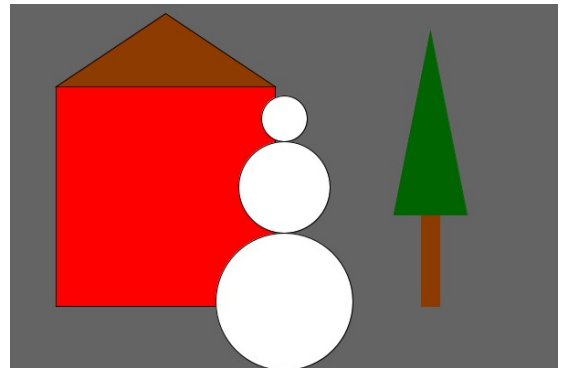
Run it to verify that it draws a white snowman on a gray background.

2. Modify the sketch so that it contains a function named **drawSnowman** which draws the snowman. Be sure to include everything related to drawing a snowman in the function, and be sure to call the function from draw()!

Note that you aren't changing the functionality of the sketch at all – you're just modifying it so the snowman-drawing is done by a function instead of directly in draw().

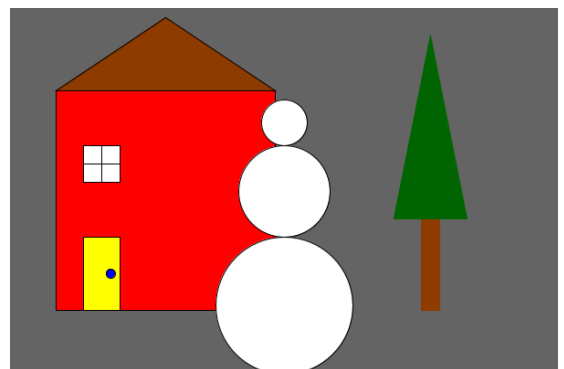
3. Modify the sketch so that it draws a scene similar to the one shown. Make sure the house is behind the snowman! Create and use drawing functions for the house and tree.

Look up how to draw a triangle in the Processing API (<https://processing.org/reference/>).



4. Add a door and a window to the house as shown. Create and use drawing functions for the door and window.

Note: just as the house includes the door and window, drawing the house should include drawing the door and window – where will you put the calls for the door and window functions?



If you have time –

- Create a new sketch called **sketch_240916b** which contains one or more compound things (3+ shapes each) and include a function for each compound thing. Choose a descriptive name for your function(s). Don't forget to call the functions from draw()!