

In this lab we're going to figure out (together) how to draw something in our Tetris game window.

1. Fill in your name on this sheet.

2. Declare in function **main**: `tetris_game tg = {0};`

In **main.cpp**: Pass it as a reference parameter to all of the functions that are called in function **main**.

In **init.cpp**: Pass it as a reference parameter to the functions named **init\_allegro**, **init\_tetris**, and **cleanup**.

You will need to change the prototypes for these functions in the corresponding header files.

3. Add these two new files to the project: **draw.h**, **draw.cpp**

Add this prototype and a stub function: `void draw( tetris_game tg );`

In the function **main\_loop**, add a call to function **draw** before the existing call to function **cleanup**.

4. Look up the following topics in the on-line Allegro API documentation ([alleg.sourceforge.net/stabledocs/en/allegro.html](http://alleg.sourceforge.net/stabledocs/en/allegro.html)). Be ready to familiarize the rest of the class your best understanding of what you learned:

**Laws:** Bitmap objects ('screen', and memory bitmaps)

5. Look up the following functions in the on-line Allegro API documentation ([alleg.sourceforge.net/stabledocs/en/alleg049.html](http://alleg.sourceforge.net/stabledocs/en/alleg049.html)). Be ready to describe to the rest of the class your best understanding of what they do, and where in our program you think we'll use them:

**Harrison:** `set_color_depth( 32 ), set_color_conversion( COLORCONV_TOTAL )`

**Rabe:** `makecol_depth( 32, r,g,b )`

**Garber:** `create_bitmap( SCREEN_W, SCREEN_H )`

**Brown:** `destroy_bitmap( bmp )`

**McKee:** `load_bmp( "foo", 0 )`

**Mincks:** `blit( buffer, screen, 0,0, 0,0, SCREEN_W, SCREEN_H )`

**Nafis:** `draw_trans_sprite( buffer, bmp, 0, 0 )`

**Waymouth:** `set_trans_blender(r, g, b, a )`

**Cho:** `clear_to_color( bmp, c )`

6. Look up the following functions on-line and be ready to describe to the rest of the class your best understanding of what they do:

**Pasindo:** `srand( s );` (search for "srand C++")

**Stewart:** `time( 0 );` (search for "time C++")

**Mackenzie:** `rand();` (search for "rand C++")

7. You'll brief the rest of the class on your assigned look-up, then we'll add appropriate code to draw the game board background.