

# Program Arcade Games With Python And Pygame

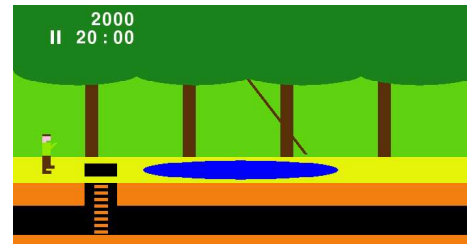
## Lab 5: Create-a-Picture

### 5.1 Description

Your assignment: Draw a pretty picture. The goal of this lab is to get practice using functions, using **for** loops, and introduce computer graphics.

To get full credit:

- You must use multiple colors.
- You must have a coherent picture. I am not interested in abstract art with random shapes.
- You must use multiple types of graphic functions (e.g. circles, rectangles, lines, etc.)
- You must use a **while** or **for** loop to create a repeating pattern. Do not just redraw the same thing in the same location 10 times. Actually use that index variable as an offset to displace what you are drawing. Remember that you can contain multiple drawing commands in a loop, so you can draw multiple train cars for example.



([labs/create\\_a\\_picture/pitfall.png](#))

For a template program to modify, look at the following example programs:

[ProgramArcadeGames.com/python\\_examples/f.php?file=pygame\\_base\\_template.py](http://ProgramArcadeGames.com/python_examples/f.php?file=pygame_base_template.py)  
([python\\_examples/f.php?file=pygame\\_base\\_template.py](#))

[ProgramArcadeGames.com/python\\_examples/f.php?file=simple\\_graphics\\_demo.py](http://ProgramArcadeGames.com/python_examples/f.php?file=simple_graphics_demo.py)  
([python\\_examples/f.php?file=simple\\_graphics\\_demo.py](#))

See [Chapter 5 \(/index.php?chapter=introduction\\_to\\_graphics\)](#) for an explanation of the template. For official documentation on the draw module:

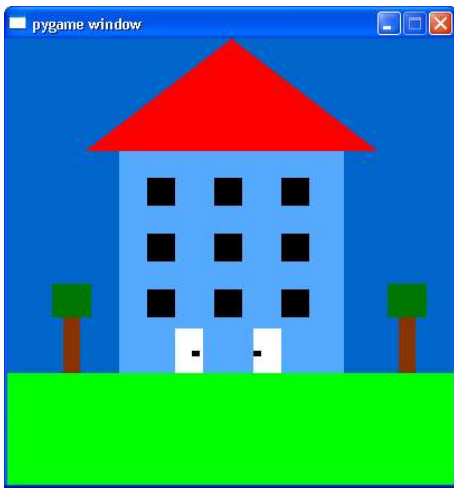
<http://www.pygame.org/docs/ref/draw.html> (<http://www.pygame.org/docs/ref/draw.html>)

To select new colors, either use

<http://www.colorpicker.com/> (<http://www.colorpicker.com/>)

or open up the Windows Paint program and click on “Edit Colors.” Copy the values for Red, Green, and Blue. Do not worry about colors for hue, Saturation, or Brilliance.

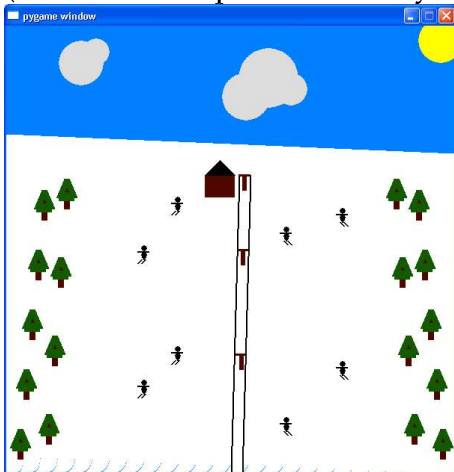
Please use comments and blank lines to make it easy to follow your program. If you have 5 lines that draw a robot, group them together with blank lines above and below. Then add a comment at the top telling the reader what you are drawing.



(labs/create\_a\_picture/house.png)



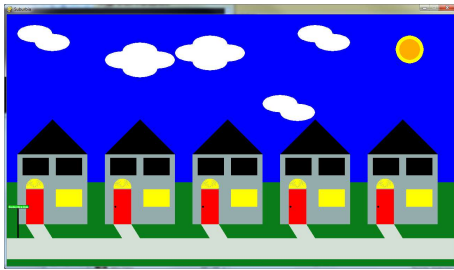
(labs/create\_a\_picture/destroy\_humans.png)



(labs/create\_a\_picture/ski.png)



(labs/create\_a\_picture/arch.png)



(labs/create\_a\_picture/suburbia.png)

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