Exercise:

* page 238
* page 246
* page 253
* page 283
* page 286
* last ex page 299

Chapter 12 summary:

In this chapter, you learned to make a plan for a game and learned the basic structure of a game written in Pygame. You learned to set a back­ground color and store settings in a separate class where you can adjust them more easily. You saw how to draw an image to the screen and give the player control over the movement of game elements. You created elements that move on their own, like bullets flying up a screen, and you deleted objects that are no longer needed. You also learned to refactor code in a project on a regular basis to facilitate ongoing development.

Gets us a game window, with a movable ship that shoots bullets.

Chapter 13 summary :

In this chapter, you learned how to add a large number of identical elements to a game by creating a fleet of aliens. You used nested loops to create a grid of elements (drawing of alien fleet and \_redraw\_alien), and you made a large set of game elements move by call­ing each element’s *update()* method. You learned to control the direction of objects on the screen and to respond to specific situations, such as when the fleet reaches the edge of the screen. You detected and responded to colli­sions when bullets hit aliens and aliens hit the ship. You also learned how to track statistics in a game and use a *game\_active* flag to determine when the game is over

Gets us a alien that moves

Chapter 14 summary:

In this chapter, you learned how to implement a Play button to start a new game. You also learned how to detect mouse events and hide the cursor in active games. You can use what you’ve learned to create other buttons, like a Help button to display instructions on how to play your games. You also learned how to modify the speed of a game as it progresses, implement a progressive scoring system, and display information in textual and nontextual ways.

UPDATES:

* update the settings to be in its own window. Create a menu, settings and quit option.
* Add a background color to the game --DONE
* Add a image to the bullet - done
* Using Pillow package create a multi-image background/ perhaps also add some frame/frame animation.
* Use the mouse, use a controller
* Use LSHIFT for a secondary type of projectile - DONE
* CREATE A SIMILAR COPY OF SC2 WOL campaign arcade
  + Will need to screen record the enemys
  + Enemys shoot bullets
  + Power ups
  + Animation frames of background
* Make the enemies move in more directions than just down

Currently in development ALIEN SHIP SHOOTER

• Defined movement trajectories for Alien Ships

• Alien ships fire down the game field

• Bug fixes and balancing to continue providing a challenge for levels 30+,  without the Alien ship speed becoming too fast for enjoyable playability.

Currently in development PAY CALCULATOR

• Allowing for more user defined pay deductibles.

• make defining user pay through wages, bonuses, differentials more user friendly.

Currently in development TIME CALCULATOR

• Create a self contained user window that takes in user input. instead of being run from the terminal.