Pseudocode for Basic Animation

#Start with a display box using IDEA / ALTER

Define a function called createDisplay:

#Import/Initialize

Import pygame

Initialize pygame

#Display Configuration

Make a variable that represents the screen with a ratio of 640, 480

Set the display caption to “Welcome, friend!”

#Entities

Make a variable called “background” that gets the size of the display and fill it with the color (52, 199, 3)

Convert background using background.convert()

*#Make a variable called “box” that’s 30 by 30*

*#Convert box using box.convert()*

*#Fill box with the color (100, 100, 100)*

Make a variable called box that gets an image that I loaded using pygame.image.load()

Use convert() or convert\_alpha() to convert the surface to something more easy

Use pygame.transform.scale() to get the image to the size I want

#set up some variables for the box

box\_x will get the position 0

box\_y will get the position 50

#Action

#Assign values to key variables

Make a variable called “clock” that gets the pygame clock

#set up main Loop

Create a variable called keepGoing that gets true

Start a while loop

#timer to set a frame rate

Set program to run at a max of 30 FPS using clock.tick()

#Event handling

Set up a for loop in pygame’s events Using pygame.event.get()

If the type of the event is equal to pygame.Quit, give keepGoing False

#change the box’s variable values

Add 7 to box\_x

#check the boundaries

If box\_x is greater than the screen width

Set box\_x to -29

If box\_y is less than 5

Make a new variable called box\_y\_direction and set it to “positive”

If box\_y is greater than 600

Give box\_y\_direction “negative”

if box\_y\_direction is equal to “positive”

add 3 to box\_y

if box\_y\_direction is equal to “negative”

subtract 25 from box\_y

#Refresh the display

Use screen.blit() to refresh the background

Use screen.blit() to refresh the box

Use pygame.display.flip() for double-buffering

Quite pygame after the loop finishes

Use \_\_name\_\_ == “\_\_main\_\_”, main() to run the program