1. Beginning\Initialize

```
import sys, pygame, dmwtmedia
pygame.init()
```
#these two statements need to be at the top of all your programs to import programs that help your program run and to initialize the use of those programs. In this case we are importing and initializing Pygame which is a set of scripts someone has already written to make your programming easier.

2. Make a Window

```
windowsize = windowwidth, windowheight = 800, 533
```
sets the size of the window with a variable called windowsize
```
screen = pygame.display.set_mode(windowsize)
```
sets up the window that will display all the graphics
```
background=dmwtmedia.load_background_image("background.png")
```
set the background to an image

Note: anytime you want to put a comment in your script that the computer will not see use a # symbol before you start writing. Everything on that line after the # symbol will not be read by the computer. It's very important and professional to put comments in your work, so that you and other people can come back and see what that part of the script was meant to do.

3. Add the Trash

```
trash, trashrect = dmwtmedia.load_trash_image("trash.png")
```
sets a variable called trash to display our image called trash.jpg and sets and invisible rectangle to draw the trash image in
```
trashspeed = [5, 1]
```
sets the speed of the trash (first number is how quickly it moves horizontally, second number is how quickly it moves vertically)

4. Direct the Trash

(Note: → indicates an indentation. Don't enter it into the code)

```
while True:          # Do the following over and over again
    # Check to see if the user has clicked the mouse or pressed a key
→for event in pygame.event.get():
→→if event.type = = pygame.QUIT:
→→→sys.exit() # if the user closed the window, quit the game
    # Move the trash
→trashrect = trashrect.move(trashspeed)
    # move the trash's invisible rectangle, based on the set speed
→if trashrect.left < 0 or trashrect.right > windowwidth:
    # if the trash is on the left or right edge of the screen, do the next line
→→trashspeed[0] = -trashspeed[0]
        # reverse the direction of the trash to bounce off wall
→if trashrect.top < 0 or trashrect.bottom > windowheight:
    # if the trash is at the top or bottom edge of the screen, do the next line
→→trashspeed[1] = -trashspeed[1]
        # reverse the direction of the trash to bounce off wall
```

5. Redraw the Screen

```
→screen.blit(background, (0, 0))
# draw over everything on the screen now by re-drawing the background
*Note: The screen is just a single image that the user sees. If we did not take the time to erase the trash from the screen, we would
actually see a "trail" of the trash as we continuously draw the ball in its new positions.

→screen.blit(trash, trashrect)
# re-draw the trash inside its invisible rectangle

→pygame.display.flip()
# make everything we have drawn on the screen become visible in the window
```