Programming Fundamentals I
Lab 11 - Lists

In this lab we are going to work on a modified version of our first-person shooter game. The player can move the crosshair by clicking on the mouse button. If there is a target in the crosshair position then it will be destroyed.


1. Instead of having one target in our program, let us instead create 9 targets. Replace lines 14 to 18 with the following code, then complete the code:

```
targets = -- (A)

for i --- (B) -- :
    target = Actor('bullseye.png')
    target.x = -- (C) --
    target.y = 2*BLOCK_SIZE
    target.value = 10
    target.visible = True
    targets.append(-- (D) --)
```

Here, we need to use a list called *targets* that will store all the targets in the game. Initially, this list should be empty. The loop will create 9 new target one at a time, and add each target to the list of targets.

2. Modify lines 21 and 22 so all the *targets* are displayed on the screen. You need to use a for loop to go over each target in the list of *targets*. The screen should be the following:
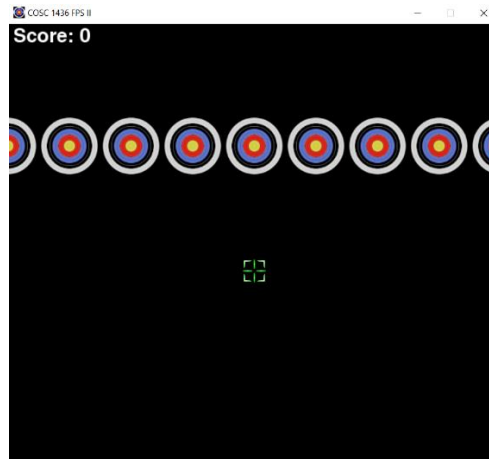
3. Modify the code that handles the collision of the *crosshair* with the *target* (lines 35 to 37). Instead of checking the collision of the *crosshair* with one target, now we need to check if the *crosshair* collides with any of the 9 *targets*. Therefore, we need to use a for loop to go over each target in the *targets* list and determine whether the *crosshair* can hit a target.

WHAT TO HAND IN:

Submit your project electronically through D2L by attaching and submitting your **Python program file**.