import pygame  
class Ball:  
 def \_\_init\_\_(self, surface, color, x, y, r):  
 self.surface = surface  
 self.color = color  
 self.x = x  
 self.y = y  
 self.r = r  
 self.ver\_x = 1  
 self.ver\_y = 2  
 def draw(self):  
 pygame.draw.circle(self.surface, self.color, (self.x, self.y), self.r)  
 def update(self):  
 self.move()  
 self.bounce()  
 def move(self):  
 self.x+=self.ver\_x  
 self.y+=self.ver\_y  
 def bounce(self):  
 if self.x<self.r or self.x>400-self.r:  
 self.ver\_x\*=-1  
 if self.y < self.r or self.y > 400 - self.r:  
 self.ver\_y \*= -1  
  
pygame.init()  
window = pygame.display.set\_mode((400, 400))  
pygame.display.set\_caption("Bouncing Ball")  
clock = pygame.time.Clock()  
ball = Ball(window,(255,0,0),200,200,20)  
run = True  
while run:  
 window.fill((120,120,120)) *#change the color the window* ball.draw()  
 ball.update()  
 for event in pygame.event.get():  
 if event.type == pygame.QUIT:  
 run = False  
 pygame.display.update() *#update the window with any changes* clock.tick(30)  
pygame.quit()