PRIMEIRO PASSO: CRIAR A JANELA

```
import pygame


def main():
        pygame.init()
        tela = pygame.display.set_mode([500, 500])
        pygame.display.set_caption("Square Odissey")
        encerrar = False

        while not encerrar:
                for event in pygame.event.get():

                        if event.type == pygame.QUIT:
                                encerrar = True

                pygame.display.update()

        pygame.quit()

main()
```

SEGUNDO PASSO: PINTAR A JANELA DE BRANCO

```
import pygame


def main():
	pygame.init()
	tela = pygame.display.set_mode([500, 500])
	pygame.display.set_caption("Square Odissey")
	encerrar = False

	#CORES
	white = (255, 255, 255)

	while not encerrar:
		for event in pygame.event.get():

			if event.type == pygame.QUIT:
				encerrar = True

		tela.fill(white)

		pygame.display.update()

	pygame.quit()

main()
```

TERCEIRO PASSO: PROGRAMAR O RELÓGIO

```
import pygame

relogio = pygame.time.Clock()

def main():
    pygame.init()
    tela = pygame.display.set_mode([500, 500])
    pygame.display.set_caption("Square Odissey")
    encerrar = False

    #CORES
    white = (255, 255, 255)

    while not encerrar:
        relogio.tick(700)
        for event in pygame.event.get():

            if event.type == pygame.QUIT:
                encerrar = True

        tela.fill(white)

        pygame.display.update()

    pygame.quit()

main()
```

QUARTO PASSO: PINTAR OS QUADRADOS

```
import pygame


relogio = pygame.time.Clock()


def main():
        pygame.init()
        tela = pygame.display.set_mode([500, 500])
        pygame.display.set_caption("Square Odissey")
        encerrar = False

        #CORES
        white = (255, 255, 255)
        blue = (0, 0, 139)
        green = (152, 251, 152)

        #RETÂNGULOS
        ret = pygame.Rect(0, 400, 500, 100)
        ret2 = pygame.Rect(220, 320, 50, 50)

        while not encerrar:
                relogio.tick(700)
                for event in pygame.event.get():

                        if event.type == pygame.QUIT:
                                encerrar = True

                tela.fill(white)
```

```
                pygame.draw.rect(tela, blue, ret)
                pygame.draw.rect(tela, green, ret2)

                pygame.display.update()

        pygame.quit()

main()
```

QUINTO PASSO: PROGRAMA OS TIROS

```
import pygame
from random import randint

class Disparo(pygame.sprite.Sprite):
	def __init__(self, img, rect, x, y):
		pygame.sprite.Sprite.__init__(self)
		self.upd = 1
		self.rect = rect
		self.image = img
		self.x = x
		self.y = y

	def update(self, *args):
		self.y += self.upd

def draw_group(win, group): #Desenha um grupo
	for s in group:
		win.blit(s.image, (s.x, s.y))

relogio = pygame.time.Clock()
sprite_shoot = pygame.image.load("disparo/disparo.png")
shoots = pygame.sprite.Group()
shoot_rect = pygame.Rect(13, 13, 13, 13)


def main():
	pygame.init()
	tela = pygame.display.set_mode([500, 500])
```

```
pygame.display.set_caption("Square Odissey")
encerrar = False

#CORES
white = (255, 255, 255)
blue = (0, 0, 139)
green = (152, 251, 152)

#RETÂNGULOS
ret = pygame.Rect(0, 400, 500, 100)
ret2 = pygame.Rect(220, 320, 50, 50)

tiro = Disparo(sprite_shoot, shoot_rect, randint(1, 499), 0)
shoots.add(tiro)

while not encerrar:
        relogio.tick(700)
        for event in pygame.event.get():

                if event.type == pygame.QUIT:
                        encerrar = True

        tela.fill(white)

        pygame.draw.rect(tela, blue, ret)
        pygame.draw.rect(tela, green, ret2)

        shoots.update()
        draw_group(tela, shoots)
```

```
                pygame.display.update()

        pygame.quit()

main()
```

SEXTO PASSO: PROGRAMA AS COLISÕES

```
import pygame
from random import randint


class Disparo(pygame.sprite.Sprite):
        def __init__(self, img, rect, x, y):
                pygame.sprite.Sprite.__init__(self)
                self.upd = 1
                self.rect = rect
                self.image = img
                self.x = x
                self.y = y

        def update(self, *args):
                self.y += self.upd

def draw_group(win, group): #Desenha um grupo
        for s in group:
                win.blit(s.image, (s.x, s.y))

def is_colliding(obj1, obj2):
        if(obj1.y >= int(obj2.top)):
                return True

def is_colliding2(obj1, obj2):
        if(obj1.x < obj2.left + obj2.width and obj1.x + obj1.rect.width > obj2.left and
obj1.y < obj2.top + obj2.height and obj1.y + obj1.rect.height > obj2.y):
                return True
```

```
relogio = pygame.time.Clock()
sprite_shoot = pygame.image.load("disparo/disparo.png")
shoots = pygame.sprite.Group()
shoot_rect = pygame.Rect(13, 13, 13, 13)



def main():
        pygame.init()
        tela = pygame.display.set_mode([500, 500])
        pygame.display.set_caption("Square Odissey")
        encerrar = False
        vidas = 10

        #CORES
        white = (255, 255, 255)
        blue = (0, 0, 139)
        green = (152, 251, 152)

        #RETÂNGULOS
        ret = pygame.Rect(0, 400, 500, 100)
        ret2 = pygame.Rect(220, 320, 50, 50)

        tiro = Disparo(sprite_shoot, shoot_rect, randint(1, 499), 0)
        shoots.add(tiro)

        while not encerrar:
                relogio.tick(700)
                for event in pygame.event.get():
```

```
            if event.type == pygame.QUIT:
                encerrar = True

        if vidas == 0:
            encerrar = True

        if is_colliding(tiro, ret):
            tiro.kill()
            vidas -= 1
            tiro = Disparo(sprite_shoot, shoot_rect, randint(1, 499), 0)
            shoots.add(tiro)

        if is_colliding2(tiro, ret2):
            tiro.kill()
            tiro = Disparo(sprite_shoot, shoot_rect, randint(1, 499), 0)
            shoots.add(tiro)

        tela.fill(white)

        pygame.draw.rect(tela, blue, ret)
        pygame.draw.rect(tela, green, ret2)

        shoots.update()
        draw_group(tela, shoots)
        pygame.display.update()

pygame.quit()
```

main()

SÉTIMO PASSO: FAZ O QUADRADINHO SEGUIR O MOUSE

```
import pygame
from random import randint


class Disparo(pygame.sprite.Sprite):
	def __init__(self, img, rect, x, y):
		pygame.sprite.Sprite.__init__(self)
		self.upd = 1
		self.rect = rect
		self.image = img
		self.x = x
		self.y = y

	def update(self, *args):
		self.y += self.upd

def draw_group(win, group): #Desenha um grupo
	for s in group:
		win.blit(s.image, (s.x, s.y))

def is_colliding(obj1, obj2):
	if(obj1.y >= int(obj2.top)):
		return True

def is_colliding2(obj1, obj2):
	if(obj1.x < obj2.left + obj2.width and obj1.x + obj1.rect.width > obj2.left and
obj1.y < obj2.top + obj2.height and obj1.y + obj1.rect.height > obj2.y):
		return True
```

```
relogio = pygame.time.Clock()
sprite_shoot = pygame.image.load("disparo/disparo.png")
shoots = pygame.sprite.Group()
shoot_rect = pygame.Rect(13, 13, 13, 13)


def main():
        pygame.init()
        tela = pygame.display.set_mode([500, 500])
        pygame.display.set_caption("Square Odissey")
        encerrar = False
        vidas = 10

        #CORES
        white = (255, 255, 255)
        blue = (0, 0, 139)
        green = (152, 251, 152)

        #RETÂNGULOS
        ret = pygame.Rect(0, 400, 500, 100)
        ret2 = pygame.Rect(220, 320, 50, 50)

        tiro = Disparo(sprite_shoot, shoot_rect, randint(1, 499), 0)
        shoots.add(tiro)

        while not encerrar:
                relogio.tick(700)
                for event in pygame.event.get():
```

```
        if event.type == pygame.QUIT:
                encerrar = True

if vidas == 0:
        encerrar = True

if is_colliding(tiro, ret):
        tiro.kill()
        vidas -= 1
        tiro = Disparo(sprite_shoot, shoot_rect, randint(1, 499), 0)
        shoots.add(tiro)

if is_colliding2(tiro, ret2):
        tiro.kill()
        tiro = Disparo(sprite_shoot, shoot_rect, randint(1, 499), 0)
        shoots.add(tiro)

tela.fill(white)

(ret2.left, ret2.top) = pygame.mouse.get_pos()
ret2.left -= int(ret2.width/2)
ret2.top -= int(ret2.height/2)

pygame.draw.rect(tela, blue, ret)
pygame.draw.rect(tela, green, ret2)

shoots.update()
draw_group(tela, shoots)
```

```
                pygame.display.update()

        pygame.quit()

main()
```

OITAVO PASSO: PROGRAMA OS TEXTOS

```
import pygame
from random import randint


class Disparo(pygame.sprite.Sprite):
	def __init__(self, img, rect, x, y):
		pygame.sprite.Sprite.__init__(self)
		self.upd = 1
		self.rect = rect
		self.image = img
		self.x = x
		self.y = y

	def update(self, *args):
		self.y += self.upd


def draw_group(win, group): #Desenha um grupo
	for s in group:
		win.blit(s.image, (s.x, s.y))


def is_colliding(obj1, obj2):
	if(obj1.y >= int(obj2.top)):
		return True


def is_colliding2(obj1, obj2):
	if(obj1.x < obj2.left + obj2.width and obj1.x + obj1.rect.width > obj2.left and
obj1.y < obj2.top + obj2.height and obj1.y + obj1.rect.height > obj2.y):
		return True
```

```
relogio = pygame.time.Clock()
sprite_shoot = pygame.image.load("disparo/disparo.png")
shoots = pygame.sprite.Group()
shoot_rect = pygame.Rect(13, 13, 13, 13)


def main():
        pygame.init()
        tela = pygame.display.set_mode([500, 500])
        pygame.display.set_caption("Square Odissey")
        encerrar = False
        vidas = 10

        #CORES
        white = (255, 255, 255)
        blue = (0, 0, 139)
        green = (152, 251, 152)

        #RETÂNGULOS
        ret = pygame.Rect(0, 400, 500, 100)
        ret2 = pygame.Rect(220, 320, 50, 50)

        fonte = pygame.font.SysFont(pygame.font.get_default_font(), 20)


        tiro = Disparo(sprite_shoot, shoot_rect, randint(1, 499), 0)
        shoots.add(tiro)
```

```
while not encerrar:
        relogio.tick(700)
        for event in pygame.event.get():

                if event.type == pygame.QUIT:
                        encerrar = True

        if vidas == 0:
                encerrar = True

        if is_colliding(tiro, ret):
                tiro.kill()
                vidas -= 1
                tiro = Disparo(sprite_shoot, shoot_rect, randint(1, 499), 0)
                shoots.add(tiro)

        if is_colliding2(tiro, ret2):
                tiro.kill()
                tiro = Disparo(sprite_shoot, shoot_rect, randint(1, 499), 0)
                shoots.add(tiro)

        tela.fill(white)

        (ret2.left, ret2.top) = pygame.mouse.get_pos()
        ret2.left -= int(ret2.width/2)
        ret2.top -= int(ret2.height/2)

        pygame.draw.rect(tela, blue, ret)
        pygame.draw.rect(tela, green, ret2)
```

```
                text_vidas = fonte.render("VIDAS", 1, (0,0,0))
                text_numero = fonte.render(str(vidas), 1, (0,0,0))

                tela.blit(text_vidas, (25, 25))
                tela.blit(text_numero, (75, 25))

                shoots.update()
                draw_group(tela, shoots)
                pygame.display.update()

        pygame.quit()

main()
```