

Source Code:

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import pygame
import random

pygame.init()

# Colors
white = (255, 255, 255)
red = (255, 0, 0)
black = (0, 0, 0)
green = (17,100,4)
background_green = (109,243,88)

# Creating window
screen_width = 900
screen_height = 600
gameWindow = pygame.display.set_mode((screen_width, screen_height))

# Game Title
pygame.display.set_caption("My first Game ")
pygame.display.update()
clock = pygame.time.Clock()
font = pygame.font.SysFont(None, 55)

def text_screen(text, color, x, y):
    screen_text = font.render(text, True, color)
    gameWindow.blit(screen_text, [x,y])

# def snack_head(x, y):
#     pygame.draw.ellipse(gameWindow,green,[x,y,10,10])
#     pass

# def snack_body():
#     pass

def plot_snake(gameWindow, color, snk_list, snake_size):
    for x,y in snk_list:
        pygame.draw.ellipse(gameWindow, green, [x, y, snake_size, snake_size])
        # pygame.draw.ellipse(gameWindow, white, [x , y , 10,10])
        # pygame.draw.ellipse(gameWindow, white, [x+20, y, 10, 10])

# Game Loop
def gameloop():
    # Game specific variables
    exit_game = False
    game_over = False
    snake_x = 45
    snake_y = 55
    velocity_x = 0
    velocity_y = 0
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snk_list = []
snk_length = 1

# Plotting the food on the game window
food_x = random.randint(20, screen_width / 2)
food_y = random.randint(20, screen_height / 2)
score = 0
init_velocity = 5
snake_size = 30
fps = 20

while not exit_game:
    if game_over:
        gameWindow.fill(white)
        text_screen("Game Over!", red, 150, 150)
        text_screen("your score : " + str(score * 10) ,red,150,250)

        #text_screen()
        for event in pygame.event.get():
            if event.type == pygame.QUIT:
                exit_game = True

            if event.type == pygame.KEYDOWN:
                if event.key == pygame.K_RETURN:
                    gameloop()

    else:

        for event in pygame.event.get():
            if event.type == pygame.QUIT:
                exit_game = True

            if event.type == pygame.KEYDOWN:
                if event.key == pygame.K_RIGHT:
                    velocity_x = init_velocity
                    velocity_y = 0

                if event.key == pygame.K_LEFT:
                    velocity_x = - init_velocity
                    velocity_y = 0

                if event.key == pygame.K_UP:
                    velocity_y = - init_velocity
                    velocity_x = 0

                if event.key == pygame.K_DOWN:
                    velocity_y = init_velocity
                    velocity_x = 0

        snake_x = snake_x + velocity_x
        snake_y = snake_y + velocity_y

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if abs(snake_x - food_x)<20 and abs(snake_y - food_y)<20:
    score +=1
    food_x = random.randint(20, screen_width / 2)
    food_y = random.randint(20, screen_height / 2)
    snk_length +=5

gameWindow.fill(background_green)
text_screen("Score: " + str(score * 10), red, 5, 5)
pygame.draw.rect(gameWindow, red, [food_x, food_y, snake_size, snake_size])

head = []
head.append(snake_x)
head.append(snake_y)
snk_list.append(head)

if len(snk_list)>snk_length:
    del snk_list[0]

if head in snk_list[:-1]:
    game_over = True

if snake_x<0 or snake_x>screen_width or snake_y<0 or snake_y>screen_height:
    game_over = True
plot_snake(gameWindow, black, snk_list, snake_size)
pygame.display.update()
clock.tick(fps)

pygame.quit()
quit()
gameloop()

```

Output:

