import pygame

import sys

import random

# Initialize Pygame

pygame.init()

# Colors

BLACK = (0, 0, 0)

WHITE = (255, 255, 255)

RED = (255, 0, 0)

# Screen dimensions

SCREEN\_WIDTH = 600

SCREEN\_HEIGHT = 400

# Worm block size and speed

BLOCK\_SIZE = 20

SPEED = 10

# Initialize the screen

screen = pygame.display.set\_mode((SCREEN\_WIDTH, SCREEN\_HEIGHT))

pygame.display.set\_caption('Worm Game')

# Clock to control the game's speed

clock = pygame.time.Clock()

# Function to display messages

def display\_message(message, color, font\_size):

font = pygame.font.SysFont(None, font\_size)

text = font.render(message, True, color)

screen.blit(text, [SCREEN\_WIDTH / 6, SCREEN\_HEIGHT / 3])

# Function to draw the worm

def draw\_worm(worm\_list):

for block in worm\_list:

pygame.draw.rect(screen, BLACK, [block[0], block[1], BLOCK\_SIZE, BLOCK\_SIZE])

# Main function to run the game

def game\_loop():

game\_over = False

game\_close = False

# Initial position of the worm

worm\_list = []

worm\_length = 1

# Initial position and movement of the worm

x = SCREEN\_WIDTH / 2

y = SCREEN\_HEIGHT / 2

x\_change = 0

y\_change = 0

# Initial position of the food

food\_x = round(random.randrange(0, SCREEN\_WIDTH - BLOCK\_SIZE) / BLOCK\_SIZE) \* BLOCK\_SIZE

food\_y = round(random.randrange(0, SCREEN\_HEIGHT - BLOCK\_SIZE) / BLOCK\_SIZE) \* BLOCK\_SIZE

while not game\_over:

while game\_close == True:

screen.fill(WHITE)

display\_message("You Lost! Press Q-Quit or C-Play Again", RED, 50)

pygame.display.update()

for event in pygame.event.get():

if event.type == pygame.KEYDOWN:

if event.key == pygame.K\_q:

game\_over = True

game\_close = False

if event.key == pygame.K\_c:

game\_loop()

for event in pygame.event.get():

if event.type == pygame.QUIT:

game\_over = True

if event.type == pygame.KEYDOWN:

if event.key == pygame.K\_LEFT:

x\_change = -BLOCK\_SIZE

y\_change = 0

elif event.key == pygame.K\_RIGHT:

x\_change = BLOCK\_SIZE

y\_change = 0

elif event.key == pygame.K\_UP:

y\_change = -BLOCK\_SIZE

x\_change = 0

elif event.key == pygame.K\_DOWN:

y\_change = BLOCK\_SIZE

x\_change = 0

# Check if worm hits the boundary

if x >= SCREEN\_WIDTH or x < 0 or y >= SCREEN\_HEIGHT or y < 0:

game\_close = True

# Update worm's position

x += x\_change

y += y\_change

screen.fill(WHITE)

pygame.draw.rect(screen, RED, [food\_x, food\_y, BLOCK\_SIZE, BLOCK\_SIZE])

worm\_head = []

worm\_head.append(x)

worm\_head.append(y)

worm\_list.append(worm\_head)

if worm\_length < len(worm\_list):

del worm\_list[0]

for the\_worm in worm\_list[:-1]:

pygame.draw.rect(screen, BLACK, [the\_worm[0], the\_worm[1], BLOCK\_SIZE, BLOCK\_SIZE])

pygame.draw.rect(screen, BLACK, [the\_worm[0], the\_worm[1], BLOCK\_SIZE, BLOCK\_SIZE])

pygame.display.update()

# Worm eats the food

if x == food\_x and y == food\_y:

food\_x = round(random.randrange(0, SCREEN\_WIDTH - BLOCK\_SIZE) / BLOCK\_SIZE) \* BLOCK\_SIZE

food\_y = round(random.randrange(0, SCREEN\_HEIGHT - BLOCK\_SIZE) / BLOCK\_SIZE) \* BLOCK\_SIZE

worm\_length += 1

clock.tick(SPEED)

pygame.quit()

quit()

game\_loop()