

```
1 import pygame
2 import random
3 import sys
4 pygame.init()
5
6 # Constants
7 WIDTH, HEIGHT = 600, 400
8 SNAKE_SIZE = 20
9 SNAKE_SPEED = 15
10
11 # Colors
12 BLACK = (0, 0, 0)
13 WHITE = (255, 255, 255)
14
15 # Create the screen
16 screen = pygame.display.set_mode((WIDTH, HEIGHT))
17 pygame.display.set_caption("Snake Game")
18 # Snake
19 snake_x = WIDTH // 2
20 snake_y = HEIGHT // 2
21 snake_x_change = 0
22 snake_y_change = 0
23 snake_body = []
24
25 # Food
26 food_x = random.randint(0, (WIDTH - SNAKE_SIZE) //
    SNAKE_SIZE) * SNAKE_SIZE
27 food_y = random.randint(0, (HEIGHT - SNAKE_SIZE
    ) // SNAKE_SIZE) * SNAKE_SIZE
28 game_over = False
29 while not game_over:
30     for event in pygame.event.get():
31         if event.type == pygame.QUIT:
32             game_over = True
33         keys = pygame.key.get_pressed()
34         if keys[pygame.K_UP]:
35             snake_x_change = 0
36             snake_y_change = -SNAKE_SIZE
37         if keys[pygame.K_DOWN]:
38             snake_x_change = 0
39             snake_y_change = SNAKE_SIZE
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40         if keys[pygame.K_LEFT]:
41             snake_x_change = -SNAKE_SIZE
42             snake_y_change = 0
43         if keys[pygame.K_RIGHT]:
44             snake_x_change = SNAKE_SIZE
45             snake_y_change = 0
46             snake_x += snake_x_change
47             snake_y += snake_y_change
48             if snake_x >= WIDTH or snake_x < 0
or snake_y >= HEIGHT or snake_y < 0:
49                 game_over = True
50
51         if snake_x == food_x and snake_y
== food_y:
52             # Generate new food coordinates
53             food_x = random.randint(0, (
WIDTH - SNAKE_SIZE) // SNAKE_SIZE) * SNAKE_SIZE
54             food_y = random.randint(0, (
HEIGHT - SNAKE_SIZE) // SNAKE_SIZE) * SNAKE_SIZE
55             # Increase the snake's length
56             # Add code to increase the
snake's length
57             # Clear the screen
58             screen.fill(BLACK)
59
60             # Draw the snake
61             # Add code to draw the snake's
body
62
63             # Draw the food
64             pygame.draw.rect(screen, WHITE
, [food_x, food_y, SNAKE_SIZE, SNAKE_SIZE])
65
66             # Update the screen
67             pygame.display.update()
68             if (snake_x, snake_y) in
snake_body:
69                 game_over = True
70                 score = len(snake_body)
71                 font = pygame.font.Font(
None, 36)

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```
72         text = font.render(f"Score
    : {score}", True, WHITE)
73         screen.blit(text, (10, 10
    ))
74         # Update the display
75         pygame.display.update()
76
77
78     def main():
79         while not game_over:
80
81
82         # ... (complete game logic
    )
83
84     if __name__ == "__main__":
85         main()
86         pygame.quit()
87         sys.exit()
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```