```
import pygame
import sys
# Initialize Pygame
pygame.init()
# Constants
WIDTH, HEIGHT = 800, 600
WHITE = (255, 255, 255)
BLACK = (0, 0, 0)
# Set up the display window
screen = pygame.display.set mode((WIDTH, HEIGHT))
pygame.display.set caption("Bresenham's Line Algorithm")
# Bresenham's line drawing algorithm
def draw line bresenham(x0, y0, x1, y1):
    dx = abs(x1 - x0)
    dy = abs(y1 - y0)
    steep = dy > dx
    if steep:
        x0, y0 = y0, x0
        x1, y1 = y1, x1
    swapped = False
    if x0 > x1:
        x0, x1 = x1, x0
        y0, y1 = y1, y0
        swapped = True
    dx = x1 - x0
    dy = y1 - y0
    error = int(dx / 2.0)
    ystep = 1 if y0 < y1 else -1
    y = y0
    points = []
    for x in range(x0, x1 + 1):
        coord = (y, x) if steep else (x, y)
        points.append(coord)
        error -= abs(dy)
        if error < 0:
            y += ystep
            error += dx
    if swapped:
        points.reverse()
    return points
# Main loop
def main():
```

```
start point = (100, 100)
    end_point = (700, 400)
   running = True
   while running:
       for event in pygame.event.get():
            if event.type == pygame.QUIT:
               pygame.quit()
                sys.exit()
       screen.fill(WHITE)
        # Draw the line using Bresenham's algorithm
        line_points = draw_line_bresenham(*start_point, *end_point)
        for point in line points:
            pygame.draw.circle(screen, BLACK, point, 1)
       pygame.display.flip()
   pygame.quit()
if __name__ == "__main__":
   main()
```