SOURCE CODE

```
import pygame
import sys


def ddaLine(x1,y1,x2,y2):
    dx = x2 - x1
    dy = y2 - y1

        if(dx>dy):
            steps = abs(dx)
        else:
            steps = abs(dy)

        xinc = dx / steps
        yinc = dy / steps

        x = x1
        y = y1

        for i in range(int(steps) + 1):
            screen.set_at((round(x), round(y)), WHITE)#plot(int(x), int(y))
            x = x + xinc
            y = y + yinc


    pygame.init()
    WIDTH = 800
    HEIGHT = 600

    screen = pygame.display.set_mode((WIDTH, HEIGHT))

    pygame.display.set_caption("DDA Line Drawing Algorithm")

    WHITE = (12, 15, 255)
    BLACK = (255, 255, 255)


    def main():
        while True:
            for event in pygame.event.get():
                if event.type==pygame.QUIT:
                    pygame.quit()
                    sys.exit()
```

```
46.             screen.fill(BLACK)
47.             ddaLine(25, 125, 700, 222)
48.             pygame.display.flip()
49.             pygame.time.delay(100)
50.
51.     if __name__ == "__main__":
52.         main()
```

OUTPUT

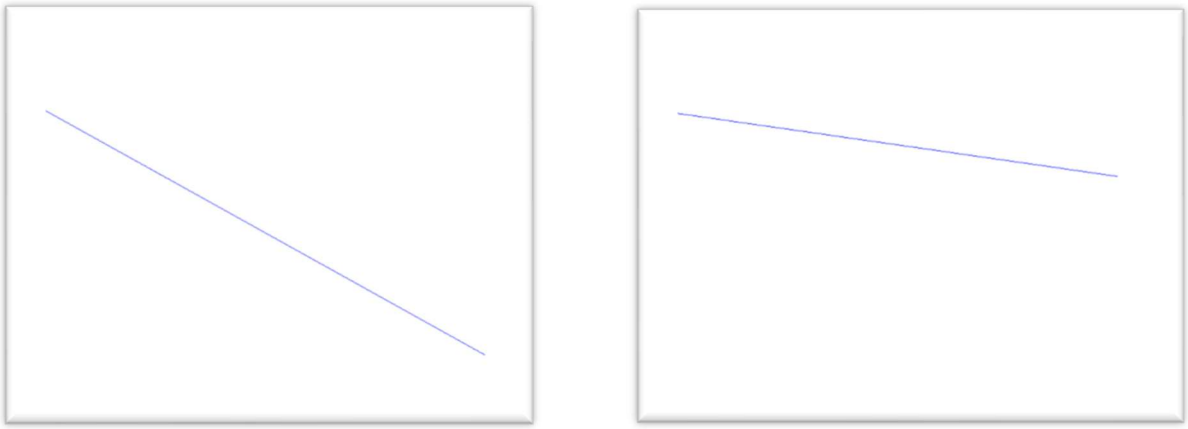

Fig 2.1. Outputs of DDA Line Algorithm