رفیده عزت منصور

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```
from matplotlib import pyplot as plt
import math
x=int(input ("enter x1:"))
y=int(input ("enter y1:"))
xend=int(input ("enter x2:"))
yend=int(input ("enter y2:"))
dy=yend-y
dx=xend-x
m=dy/dx
n=max(dx ,dy)
x_coordinates=[]
y_coordinates=[]

if m>1:

    for i in range (0,int(n)) :
       print ((round(x+1/m), round(y+1)))
       x=x+1/m
       y=y+1
       x_coordinates.append(math.ceil(x))
       y_coordinates.append(math.ceil(y))

elif m==1:
    for i in range (0,int(n)) :
        print((x+1,y+1))

        x=(x+1)
        y=y+1
        x_coordinates.append(x)
        y_coordinates.append(y)

else :
    for i in range (0,int(n)) :
        print ((round(x+1),round(y+m) ))
        x=x+1
        y=y+m
        x_coordinates.append(x)
        y_coordinates.append(y)

plt.plot (x_coordinates,y_coordinates,marker="o",markersize=1,
```

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                    markerfacecolor="green")
plt.show()
```