PROG 2(a) COMPUTING DISTANCE USING EUCLIDEAN MEASURE

SOURCE CODE:

```
import matplotlib.pyplot as plt
import pandas as pd
import math
data =pd.read_csv('dir.csv')
directions=data.values
xo=yo=0
x=[0]
y=[0]
for i in directions:
   if i[0]=='up':
      yo=yo+int(i[1])
      x.append(xo)
      y.append(yo)
   elif i[0]=='down':
      yo=yo-int(i[1])
      x.append(xo)
      y.append(yo)
   elif i[0]=='left':
      xo=xo-int(i[1])
      x.append(xo)
      y.append(yo)
   elif i[0]=='right':
      xo=xo+int(i[1])
      x.append(xo)
      y.append(yo)
dist=math.sqrt((x[0]-x[-1])**2+(y[0]-y[-1])**2)
print(dist)
plt.plot(x,y)
```

plt.show()

INPUT: dir.csv

	A	B
1	direction	steps
2	up	1
3	down	2
4	right	2
5	up	10
6	down	1
7	left	2
8	right	10

OUTPUT: