```
import numpy as np
3
   SIZE = 100
   A = np.pi
5 \mid B = np.exp(1)
   err = np.random.normal(scale=np.pi, size=SIZE)
   f = lambda x: A * x + B
   x = np.linspace(-10, 10, SIZE)
10
   y = f(x) + err
   a, b = np.polyfit(x, y, deg = 1)
   print(a, '", b, end='\n')
13
   f = open("data.dat", "w")
14
   f.write("x\ty")
15
16
17
   for i in range(len(x)):
18
           f.write("\n{}\t{}".format(x[i], y[i]))
```

