

```
1 import numpy as np
2
3 SIZE = 100
4 A = np.pi
5 B = np.exp(1)
6 err = np.random.normal(scale=np.pi, size=SIZE)
7 f = lambda x: A * x + B
8
9 x = np.linspace(-10, 10, SIZE)
10 y = f(x) + err
11 a, b = np.polyfit(x, y, deg = 1)
12 print(a, '\u', b, end='\n')
13
14 f = open("data.dat", "w")
15 f.write("x\ty")
16
17 for i in range(len(x)):
18     f.write("\n{}\t{}".format(x[i], y[i]))
```

