

```
1: import numpy as np
2:
3: def generate_trainingdata(m=25):
4:     return np.array([0,0])+0.25*np.random.randn(m,2)
5:
6: def f(x, minibatch):
7:     # loss function sum_{w in training data} f(x,w)
8:     y=0; count=0
9:     for w in minibatch:
10:         z=x-w-1
11:         y=y+min(10*(z[0]**2+z[1]**2), (z[0]+2)**2+(z[1]+4)**2)
12:         count=count+1
13:     return y/count
```