```python
import matplotlib.pyplot as plt
import numpy as np
import warnings
warnings.filterwarnings('ignore')


x1s = np.arange(-10,11,1)
x2s = np.arange(-10,11,1)


plt.figure(figsize=(10,10))
for each in x1s:
    for EACH in x2s:

        plt.scatter(each, EACH, c='r',s=1)
        plt.arrow(each, EACH, -each/EACH, 1,head_width=0.25, head_length=0.25,linewidth=1.5,
        plt.arrow(each, EACH, -EACH/each, 1,head_width=0.25, head_length=0.25,linewidth=1.5,

        plt.xlabel('x1')
        plt.ylabel('x2')
```