Quiz 1

Write a function `powerlists(L, k)` that takes as input a list of numbers \( L = [a, b, c, \ldots] \) and a natural number \( k \), and outputs a list of \( k \) lists, one with elements \( a, b, c, \ldots \), one with elements \( a^2, b^2, c^2, \ldots \), etc, all the way up to \( a^k, b^k, c^k, \ldots \).

For example:

```
In:   L=[2,5,1]
In:   k=4
In:   powerlists(L,k)
Out:  [[2,5,1],[4,25,1],[8,125,1],[16,625,1]]
```