cat -> 22228

22228 -> ['act', 'aabt', 'cat', 'aaaat', 'bbt', 'abat', 'baat']

Checking through an english dictionary we can get that only ['act', 'cat'] are english words

```
mapper = {'2': 'a', '22': 'b', '222': 'c', '3': 'd', '33': 'e', '333': 'f', '4': 'g', '44': 'h', '444': 'i', '5': 'j', '55': 'k', '555': 'l', '6': 'm',
          '66': 'n', '666': 'o', '7': 'p', '77': 'q', '777': 'r', '7777': 's', '8': 't', '88': 'u', '888': 'v', '9': 'w', '99': 'x', '999': 'y', '9999': 'z', '0': ' '}
```

22228
1-> a2228
2-> aa228, b228
3-> aaa28, ab28, c28, ba28
4-> aaaa8, aab8, aba8, ac8, baa8, bb8, ca8
5-> aaaat, aabt, abat, act, baat, bbt, cat

English dictionary will filter all but act and cat

- Basic attempt is to convert the entire sentence into as many possible arrays as possible
- Later it was optimized by splitting the sentence into words and then running the same program.

If sentence contains m words each of length w
$O(w,m) = w^m!$ (basic attempt)
O(w,m) = w! (optimized case)