Python code:

```
import numpy as np
src = """
        cdrdghekrc ghryio uhghcghuwq fhr md hr dvfdxxdre phl
        big pgkedgq ei cde ewdkg fgdhekzd bxip cikrc he ewd
        mdckrrkrc ib ewd yhl. ewd pgkedg whq ri kydh pwhe eiukf
        ewd ghryio uhghcghuw pkxx md hmiae pwdr ke huudhgq. ewkq
        bigfdq ewd pgkedg ei aqd fgdhekzkel ei fiouxded ird ib
        ewgdd fiooir pgkekrc fwhxxdrcdq. ewd pgkedg fhr aqd ewd
        uhghcghuw hq ewd bkgqe ird ib h qwige qeigl hry makxy
        auir ke. h qdfiry iuekir kq ei aqd ewd ghryio uhghcghuw
        qiodpwdgd kr h qwige qeigl ewdl fgdhed. ewd ewkgy iuekir
        kq ei whzd ewd ghryio uhghcghuw md ewd drykrc uhghcghuw
        kr h qwige qeigl. ri oheedg pwkfw ib ewdqd fwhxxdrcdq
        kq arydgehjdr, ewd pgkedg kq bigfdy ei aqd fgdhekzkel
        ei krfiguighed ewd uhghcghuw krei ewdkg pgkekrc
    """

dest = ""

fre = {
        'a':0,'b':0,'c':0,'d':0,'e':0,
        'f':0,'g':0,'h':0,'i':0,'j':0,
        'k':0,'l':0,'m':0,'n':0,'o':0,'p':0,
        'q':0,'r':0,'s':0,'t':0,'u':0,
        'v':0,'w':0,'x':0,'y':0,'z':0
    }
def freq(src):
    for i in src:
        for j in i:
            if fre.get(j)!=None:
                fre[j] += 1
    keys = list(fre.keys())
    values = list(fre.values())
    sorted_value_index = np.array(values).argsort()[-26:][::-1]
    sorted_dict = {keys[i]: values[i] for i in sorted_value_index}

    for i in sorted_dict:
        print('        ',end='')
```

```
        print(i,end=':')
        print(sorted_dict[i])



mapping = {
            '.':'.',',':',','\n':'\n','h':'a',
            'm':'b','b':'f','k':'i','e':'t',
            'w':'h','d':'e','i':'o','r':'n',
            'g':'r','f':'c','u':'p','c':'g',
            'l':'y','z':'v','x':'l','p':'w',
            'y':'d','o':'m','q':'s','a':'u',
            'v':'x','j':'k'
        }



def algo(src,mapping):
    for i in src:
        for j in i:
            if j !=' ':
                if mapping.get(j):
                    print(mapping[j],end='')
                else:
                    print('*',end='')
            else:
                print(" ",end='')
    print()

def decipher():
    print('\n
------------------------------------------------------------\n')
    freq(src)
    print('\n
------------------------------------------------------------')
    print(src)
    print('
------------------------------------------------------------')
    algo(src,mapping)
```

```
    print('
------------------------------------------------------------')

decipher()
```

Reasoning:

I used the cheat_sheet.png reference provided by you. Firstly I mapped all the punctuation and new lines with themselves. Then I found a one letter reference which I mapped as ‘a’. Then I searched all the two letter words and found two of the most frequent two letter words have the same first letter and the last letter as ‘i’ which I later found out as ‘of’ ,’to’ and ‘no’ so I mapped ‘i’ with ‘o’,’e’ with ‘t’ and ‘b’ with ‘f’ . Later observing some frequent 3 letter words like ‘the’,’and’ I found the mapping of ‘r’ to ’n’. In the same way I figured out the mapping of ‘k’ to ‘i’ and ‘x’ to ‘l’ as a double letter. And from the most frequent letters ‘d’,’e’,’g’ were confirmed. Thus it gave me a more clear insight about the words to guess the next mappings.