


```
In [5]: # Solution 19:
file1 = open(r'happynumbers_1000.txt')
file2 = open(r'primenumbers_1000.txt')

a = file1.readlines()
b = file2.readlines()
c = [i for i in a if i in b]
#print(c)
print(c)

['7\n', '13\n', '19\n', '23\n', '31\n', '79\n', '97\n', '103\n', '109\n', '139\n', '167\n', '193\n',
'239\n', '263\n', '293\n', '313\n', '331\n', '367\n', '379\n', '383\n', '397\n', '467\n', '563\n', '6
17\n', '653\n', '673\n', '683\n', '709\n', '739\n', '761\n', '881\n', '907\n', '937\n']
```

Question 20:

Create a function that takes a string as an argument and returns the Morse code equivalent.

Expected Output:

```
encode_morse("HELP ME !") == ". . . . . - . - . - . - . - . -"
```

This dictionary can be used for coding:

```
char_to_dots = {
    'A': '. -',      'B': '. . . -',  'C': '. - . -',  'D': '. . .',   'E': '. -',    'F': '. . - .',
    'G': '. - .',    'H': '. . . .',  'I': '. - .',   'J': '. - . - .', 'K': '. - . -', 'L': '. . - .',
    'M': '. - .',    'N': '. -',    'O': '. - -',   'P': '. - . -', 'Q': '. - - .', 'R': '. - .',
    'S': '. . .',    'T': '. -',    'U': '. . -',   'V': '. . - .', 'W': '. - - .', 'X': '. - . -',
    'Y': '. - -',    'Z': '. - - .',

    '0': '. - - - .', '1': '. - - - -', '2': '. - . - -', '3': '. . - - -', '4': '. - . - .',
    '5': '. . . - .', '6': '. - . - -', '7': '. - - - .', '8': '. - - - .', '9': '. - - - .',

    '.': '. - .',    ' ': '. - . . .',  '***': '. - - - -', '0!': '. - - - .', '1!': '. - - - -',
    '(!': '. - - .', '(!': '. - - .', '(!': '. - - .', '(!': '. - - .', '(!': '. - - .',
    '(!': '. - - .', '(!': '. - - .', '(!': '. - - .', '(!': '. - - .', '(!': '. - - .',
    '(!': '. - - .',
}
```

```
In [9]: # Solution 20:
chars = '.,0123456789?abodefghijklmnopqrstuvmwxyz"

codes = ""
for char in chars:
    code = char_to_dots.get(char, '')
    codes += code + " "

keys = dict(zip(chars, codes.split()))

def zhuanhuan(char):
    return keys.get(char.lower(), char)

print(''.join(zhuanhuan(c) for c in 'HELP ME !'))
print(''.join(zhuanhuan(c) for c in '! FINISH THIS WORK!'))

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..- - - - - ..... - - - - - - - - - -
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In [ ]:
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