```python
# 验证码生成库
from captcha.image import ImageCaptcha  # pip install captcha
import numpy as np
from PIL import Image
import random
import sys

number = ['0', '1', '2', '3', '4', '5', '6', '7', '8', '9']
alphabet = ['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']
ALPHABET = ['A','B','C','D']
captcha_dir = './captcha/'

def random_captcha_text(char_set=number+alphabet+ALPHABET, captcha_size=4):
    # 验证码列表
    captcha_text = []
    for i in range(captcha_size):
        # 随机选择
        c = random.choice(char_set)
        # 加入验证码列表
        captcha_text.append(c)
    return captcha_text


# 生成字符对应的验证码
def gen_captcha_text_and_image():
    image = ImageCaptcha(
    # 获得随机生成的验证码
    captcha_text = random_captcha_text()
    # 把验证码列表转为字符串
    captcha_text = ''.join(captcha_text)
    # 生成验证码
    captcha = image.generate(captcha_text)
    image.write(captcha_text, captcha_dir + captcha_text + '.jpg')  # 写到文件


# 数量少于10000，因为重名
num = 10000
if __name__ == '__main__':
    for i in range(num):
        gen_captcha_text_and_image()
        sys.stdout.write('\r>> Creating image %d/%d' % (i + 1, num))
        sys.stdout.flush()
    sys.stdout.write('\n')
    sys.stdout.flush()

    print("生成完毕")

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