

```

import math
import os
import random

def data_list(path):
    if os.path.exists(data_path+'train_data.txt'):
        os.remove(data_path+'train_data.txt')
    if os.path.exists(data_path+'val_data.txt'):
        os.remove(data_path+'val_data.txt')
    if os.path.exists(data_path + 'test_data.txt'):
        os.remove(data_path + 'test_data.txt')
    for root_dir, sub_dirs, _ in os.walk(path):
        idx = 0
        for sub_dir in sub_dirs:
            file_names = os.listdir(os.path.join(root_dir, sub_dir)) #
            file_names = list(filter(lambda x: x.endswith('.png'), file_names)) #
            random.shuffle(file_names)
            for i in range(len(file_names)):
                if i < math.floor(0.6 * len(file_names)):
                    txt_name = 'train_data.txt'
                elif i < math.floor(0.8 * len(file_names)):
                    txt_name = 'val_data.txt'
                elif i < len(file_names):
                    txt_name = 'test_data.txt'
                with open(os.path.join(path, txt_name), mode='a') as file:
                    file.write(sub_dir + ',' + os.path.join(path, sub_dir)
                               + '/' + file_names[i] + ',' + '\n')
            idx += 1

if __name__ == '__main__':
    data_path = '../data/'
    data_list(data_path)

```