Computer Vision Homework2

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1. Explain your implementation

1-1. preprocessing data

I used `resize()` to save the names of all images in the corresponding `dataset`.

To create a panorama image, first call the `cylindrical()` function to retrieve the first two images and the corresponding grayscale image. Stitch these two images together to get the initial result image.

Then, repeat the previous step with the result image and the next image in the series until all images have been stitched together to create the final panorama image.

```
for name, ext in sorted(*):
    # print(name+'.'+ext)
    # img1_ch,w,h=read("Mountain".img)
    # cp_data=[]

    SIFT_detector = cv2.SIFT_create()
    FLANN = BruteForce()
    ratio_test = 0.75(default, 0.8)

    for filename in filelist:
        if '.DS_Store' in filename:
            os.remove(os.path.join(*))
        else:
            imgname,ext = *.split('.', 1)
            img, img_gray1 = read_img(os.path.join(*), imgdpath)[0:2:-1]
            img2, img_gray2 = read_img(os.path.join(*), imgdpath)[0:2:-1]

            result_img = cylindrical(img1, img2, img_gray1, img_gray2, SIFT_detector, threshold = 0.75)
            result_gray = cv2.cvtColor(result_img, cv2.COLOR_BGR2GRAY)

            x,y,w,h = cv2.boundingRect(result_gray)[:4]
            result_gray = result_gray[y:y+h, x:x+w]

            img1 = img2
            img1_gray = img2_gray
            img2 = result_img
            img2_gray = result_gray
            print(*)
            print(*)
            print(*)
```