```bash
#!/bin/bash

#Defining paths for acqparams & index.txt

# Path for GPU
acqparams='/home/adm_comp_neuro/EM_yoga/DTI/acqparams.txt';
index='/home/adm_comp_neuro/EM_yoga/DTI/index.txt';


# Running in local computer
# acqparams='/Volumes/shares/INCE/Project_EM_YOGA/DTI/acqparams.txt';
# index='/Volumes/shares/INCE/Project_EM_YOGA/DTI/index.txt';


cat small_list| while read i
do
        cd ${i}
        pwd
    echo Running ${i}...;

        #Defining filenames

        data=$(find . -name "*DTI_68dir*.nii.gz");
        TOP_UP=$(find . -name "*TOP_UP_DTI_*.nii.gz");


        echo removing extension nii.gz
        data=${data%.nii.gz};
        TOP_UP=${TOP_UP%.nii.gz};

        # data=${data%.nii};
        # TOP_UP=${TOP_UP%.nii};

        echo ${data}

        #fslroi ${data} b0_AP 0 1;

        echo Merging AP and PA files
        #fslmerge -t AP_PA_b0 b0_AP ${TOP_UP};

        echo Running topup
        #topup --imain=AP_PA_b0 --datain=${acqparams} --
config=b02b0_1.cnf --out=top_up_AP_PA_b0 --fout=myfield --
iout=my_unwarped_images;


        #topup --imain=AP_PA_b0 --datain=/Volumes/shares/INCE/
Project_EM_YOGA/DTI/acqparams.txt --config=b02b0_1.cnf --
out=top_up_AP_PA_b0 --fout=myfield --iout=my_unwarped_images;
```

```
#fslmaths my_unwarped_images –Tmean my_unwarped_images;
#bet my_unwarped_images my_unwarped_images_brain –R –f 0.30 –g
0 –o –m;

echo Running EDDY
eddy_cuda9.1 ––imain=${data} ––
mask=my_unwarped_images_brain_mask ––acqp=${acqparams} ––index=$
{index} ––bvecs=${data}.bvec ––bvals=${data}.bval ––
topup=top_up_AP_PA_b0 ––estimate_move_by_susceptibility ––
out=eddy_unwarped_images;
#eddy ––imain=${data} ––mask=my_unwarped_images_brain_mask ––
acqp=${acqparams} ––index=${index} ––bvecs=${data}.bvec ––bvals=$
{data}.bval ––topup=top_up_AP_PA_b0 ––estimate_move_by_susceptibility
––out=eddy_unwarped_images;

cp eddy_unwarped_images.nii.gz data.nii.gz
cp ${data}.bval bvals
cp ${data}.bvec bvecs

bet eddy_unwarped_images eddy_unwarped_images_brain –R –f 0.30
–g 0 –o –m;
echo Running dtifit
dtifit ––data=eddy_unwarped_images ––out=dti ––
mask=eddy_unwarped_images_brain_mask ––bvecs=bvecs ––bvals=bvals ––wls
––sse ––save_tensor;

fslmaths dti_L2 –add dti_L3 –div 2 dti_RD;

cd ..

done
```