

com.tophat

```
DATADIR=/home/guest/project4/gencommand_proj4/  
WORKDIR=/home/guest/project4/gencommand_proj4/Tophat/  
BWT2IDX=/home/guest/project4/gencommand_proj4/athal/athal
```

```
mkdir -p $WORKDIR/Day8
```

```
tophat -o $WORKDIR/Day8 -p 10 \  
    $BWT2IDX \  
    $DATADIR/Day8.fastq
```

```
mkdir -p $WORKDIR/Day16
```

```
tophat -o $WORKDIR/Day16 -p 10 \  
    $BWT2IDX \  
    $DATADIR/Day16.fastq
```

com.cufflinks

```
THDIR=/home/guest/project4/gencommand_proj4/Tophat/  
WORKDIR=/home/guest/project4/gencommand_proj4/Cufflinks
```

```
mkdir -p $WORKDIR/Day8  
cd $WORKDIR/Day8; cufflinks -p 8 $THDIR/Day8/accepted_hits.bam
```

```
mkdir -p $WORKDIR/Day16  
cd $WORKDIR/Day16; cufflinks -p 8 $THDIR/Day16/accepted_hits.bam
```

com.cuffcompare

```
DATADIR=/home/guest/project4/gencommand_proj4/Cufflinks/  
REFDIR=/home/guest/project4/gencommand_proj4/  
WORKDIR=/home/guest/project4/gencommand_proj4/Cuffcompare/
```

```
mkdir -p $WORKDIR/Day8
```

```
cuffcompare -r $REFDIR/athal_genes.gtf \  
    -R $DATADIR/Day8/transcripts.gtf \  
    -o $WORKDIR/Day8
```

```
mkdir -p $WORKDIR/Day16
```

```
cuffcompare -r $REFDIR/athal_genes.gtf \  
    -R $DATADIR/Day16/transcripts.gtf \  
    -o $WORKDIR/Day16
```

-o \$WORKDIR/Day16

GTFs.txt

/home/guest/project4/gencommand_proj4/Cufflinks/Day8/transcripts.gtf
/home/guest/project4/gencommand_proj4/Cufflinks/Day16/transcripts.gtf

com.cuffdiff

WORKDIR=/home/guest/project4/gencommand_proj4
THDIR=/home/guest/project4/gencommand_proj4/Tophat
ANNOT=/home/guest/project4/gencommand_proj4/athal_genes.gtf

cuffmerge -g \$ANNOT -p 8 -o \$WORKDIR/Cuffmerge \$WORKDIR/Cuffmerge/GTFs.txt

cuffdiff -o \$WORKDIR/Cuffdiff -p 10 \$WORKDIR/Cuffmerge/merged.gtf \
\$THDIR/Day8/accepted_hits.bam \$THDIR/Day16/accepted_hits.bam