

### Commands used during the assembly-

1. `samtools faidx chr1_157501126.fasta gil157501126lgb1CM000462.1l:1-14072`
2. `samtools faidx chr1_206583740.fasta gil206583740lgb1CM000491.1l:1-14072`
3. `art_illumina -ss HS25 -sam -i chr1_15new.fa -l 100 -f 5 -m 500 -s 5 -o chr1_15`
4. `art_illumina -ss HS25 -sam -i chr1_20new.fa -l 100 -f 5 -m 500 -s 5 -o chr1_20`
5. `art_illumina -ss HS25 -sam -i chr1_15new.fa -l 100 -f 5 -m 3000 -s 5 -o chr1_15_3000`
6. `art_illumina -ss HS25 -sam -i chr1_20new.fa -l 100 -f 5 -m 3000 -s 5 -o chr1_20_3000`
7. `cat /usr/home/a/125/tug85760/ass4/500datasetnew/chr1_151.fq chr1__201.fq > chr151_201_500.fq`
8. `cat /usr/home/a/125/tug85760/ass4/500datasetnew/chr1_152.fq chr1_202.fq > chr152_202_500.fq`
9. `cat /usr/home/a/125/tug85760/ass4/500datasetnew/chr1_151.fq chr1_20_30001.fq > chr15_500_20_3000_1.fq`
10. `cat /usr/home/a/125/tug85760/ass4/500datasetnew/chr1_152.fq chr1_20_30002.fq > chr15_500_20_3000_2.fq`
11. `cat /usr/home/a/125/tug85760/ass4/500datasetnew/chr1_201.fq chr1__30001.fq > chr20_500_15_3000_1.fq`
12. `tug85760@bioinform:~/ass4$ cat /usr/home/a/125/tug85760/ass4/500datasetnew/chr1_202.fq chr1_15_30002.fq > chr20_500_15_3000_2.fq`
13. `velveth 21 21 -shortPaired -fastq -separate chr1_51_52.fq chr1_152_202.fq`
14. `velveth 31 31 -shortPaired -fastq -separate chr1_51_52.fq chr1_152_202.fq`
15. `velveth 41 41 -shortPaired -fastq -separate chr1_51_52.fq chr1_152_202.fq`
16. `velveth 51 51 -shortPaired -fastq -separate chr1_51_52.fq chr1_152_202.fq`
17. `velveth 21_3000 21 -fastq -short2 -shortPaired2 -separate chr20_500_15_3000_1.fq chr20_500_15_3000_2.fq`
18. `velveth 31_3000 31 -fastq -short2 -shortPaired2 -separate chr20_500_15_3000_1.fq chr20_500_15_3000_2.fq`

19. **velveth** 41\_3000 41 -fastq -short2 -shortPaired2 -separate  
chr20\_500\_15\_3000\_1.fq chr20\_500\_15\_3000\_2.fq
20. **velveth** 51\_3000 51 -fastq -short2 -shortPaired2 -separate  
chr20\_500\_15\_3000\_1.fq chr20\_500\_15\_3000\_2.fq
21. **velvetg** 21
22. **velvetg** 31
23. **velvetg** 41
24. **velvetg** 51
25. **velvetg** 21\_3000
26. **velvetg** 31\_3000
27. **velvetg** 41\_3000
28. **velvetg** 51\_3000