time velveth ~/qbb2018-answers/class\_2 31 -fastq -shortPaired reads\_low\_1.fastq reads\_low\_2.fastq

time velvetg ~/qbb2018-answers/class\_2/velvet

time spades.py --only-assembler -o ~/qbb2018-answers/class\_2/ -1 reads\_low\_1.fastq -2 reads\_low\_2.fastq

time lastz reference.fasta ./velvet/contigs.fa --format=general:zstart1,end1,name2 –output=velvet\_low\_reads\_lastz.out

sort -k 1 -n velvet\_low\_reads\_lastz.out > velvet\_low\_reads\_lastz\_sorted.out