

CS 175 Problem set 3

Rianna Patricia Cruz (2013-59075)

1. Based on my SPAdes analysis, **484425 reads were processed.**
2. The total **length of the assembly is 993171.**
3. Based on the Quast Analysis, there are **29 contigs of any length in the given sequence.**
4. Based on the Quast analysis, there are 18 contigs of significant length (size ≥ 500 bp), and 29 contigs in total. Thus there are $29 - 18$ or **11 contigs of length below this threshold.**
5. According to the Quast manual, L50 describes the number of contigs equal to or longer than N50, which is the length for which the collection of all contigs of that length or longer covers at least half an assembly. Based on my Quast analysis, **L50 = 2.**