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Procs vs Threads

Procs vs Threads is a program that takes in a file that has a string of characters and compresses it into a given number of files. The program uses RLE compression that takes a string and compresses it based off of the occurrence of a letter, and the corresponding letters around it. There are two iterations of this program, one that compresses by using threading and one that compresses by using processes. The output is a file named the original file name but formatted and split into parts for the amount of parts that was given.

CompressR_LOLS is the method that splits by processes. The way it works is the file and parts are given and the string is read from the file. The amount of child process is the amount that the file is split. Each child process will be responsible to correctly compress the designated part of the original string and create a file to store that compressed string with the correct file name and part number. After the child process are given their responsibility, they work on the worker program that is created with CompressR_worker_LOLS. The original parent process waits for all the child processes to finish. The files are formatted to the name NAME_LOLS[PART NUMBER].

ComprssT_LOLS is the method that splits and compress by using threads. The number of threads created are the number of parts that the original string is given to split and compress

into. Similar to processes, each thread is given a part of the original string to split and compress its given part into. After the threads are done, they wait to join together. Then the file names are formatted in a similar way into NAME_LOLS[PART NUMBER].

