

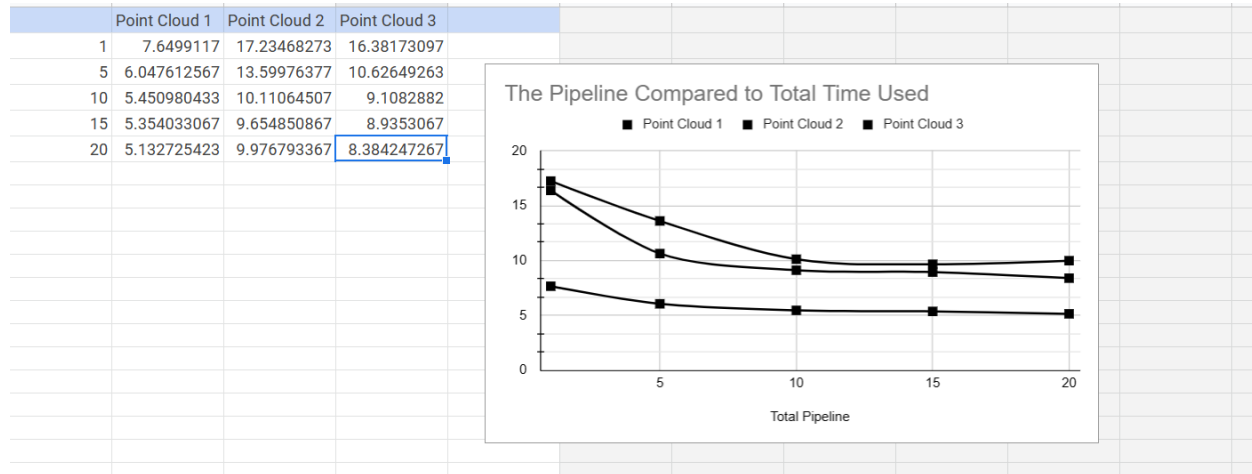
Experiment

To carry out the experiment, the "time" library was used to measure the program's runtime manually. I employed `time.Start()` and `time.Since()` functions to showcase the differences in runtime when using different thread quantities. The following parameters were used in a well-organized manner to demonstrate the differences in runtime:

Epsilon: 0.05

Confidence: 0.99

Percentage Of Points On Plane: 0.1



Results

Based on the data presented, a correlation can be observed between the number of simultaneous threads and the duration of the program's execution. The results show that increasing the number of threads leads to a reduction in the time taken to execute the PlaneRANSAC algorithm. However, it is important to note that the rate of decrease in runtime diminishes as the number of threads increases. This indicates that a moderate number of threads would be ideal, as the difference in runtime becomes insignificant with a large number of threads. From the series of experiments, it can be concluded that using between 5 and 10 threads would be optimal since the marginal differences in runtime decrease significantly beyond this range, in the order of hundredths of a second.