Task 2

Step 1:

- What is the file size in kilobytes? *68.3 KB*
- What is the file size in bytes? *69,948 bytes*
- What is the file size in bits? *559,584 bits*

Step 2:

- What is the length of the audio file in seconds? *3 seconds*
- Calculate the amount of data per second in the audio file: *22.77 KB*

Task 3

- At 100 Mbps, 68.3 KB would only take 0.005464 seconds.
- If only 95% of the bandwidth is usable then it would lower to 0.0051908 seconds.
- It is eye-opening to know that of course, the data being transferred would also need other information in it and not just the file itself. While it seems obvious, it's interesting to realize how much that actually matters, especially for smaller files where the size of that information matters a lot more for optimization.