Activity 1. Create a table with times for different sizes

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| **Obtained Times** | |
| **N** | **T (ms)** |
| *100* | *1* |
| *200* | *6* |
| *400* | *7* |
| *800* | *14* |
| *1600* | *24* |
| *3200* | *78* |
| *6400* | *311* |
| *12800* | *1255* |
| *25600* | *4985* |

|  |  |
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| **Theoretical Times** | |
| **N** | **T (ms)** |
| *100* | *#* |
| *200* | *4* |
| *400* | *24* |
| *800* | *28* |
| *1600* | *56* |
| *3200* | *96* |
| *6400* | *312* |
| *12800* | *1244* |
| *25600* | *5020* |

1. What is the complexity of the algorithm? Do the empirical results make sense?

The obtained times are similar to the theoretical so we can assume that the algorithm is working as expected. The complexity of the algorithm is O(n²) because we have 2 loops that goes through words of size n