1. Compile the given code found in archive assignment4.tgz, containing the linked list implementations, the hash tables, and the dictionary driver code. Run the code on file sp-en-dictionary.txt. Observe the number of collisions. Modify the code repeatedly to lower the size of the array used for the hash table. Run the code each time, observing the number of collisions. Draw a graph giving the number of collisions (as a percentage of the number of entries) in the function of the size of the hash table. Describe the graph and its overall behavior.
   1. A graph with blue dots

      Description automatically generatedA graph of a number of hash hashable size

      Description automatically generated with medium confidenceA graph with a line

      Description automatically generated
2. Compile the given code for the size of an array with 16 entries. Run the code on the mini dictionary sp-en-mini.txt. With the use of gdb, draw the graph of pointers of objects created in memory for this dictionary.

