

# LEVEL 4





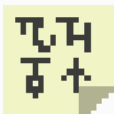
**CIA Agent:** The statistical analysis won't always work. We found a few decryption tables. We don't know which one of them is the correct one.

**Your task:** Find the correct decryption table.





Given a message, a dictionary and decryption tables, all following the rules from previous levels, **find the decryption table that will produce only words contained in the dictionary when used to decrypt the message.** Exactly one decryption table of the ones in the input will be correct.



This time, it is not guaranteed that the order of the letters, sorted by frequency of occurrence, is the same in the message and the dictionary.

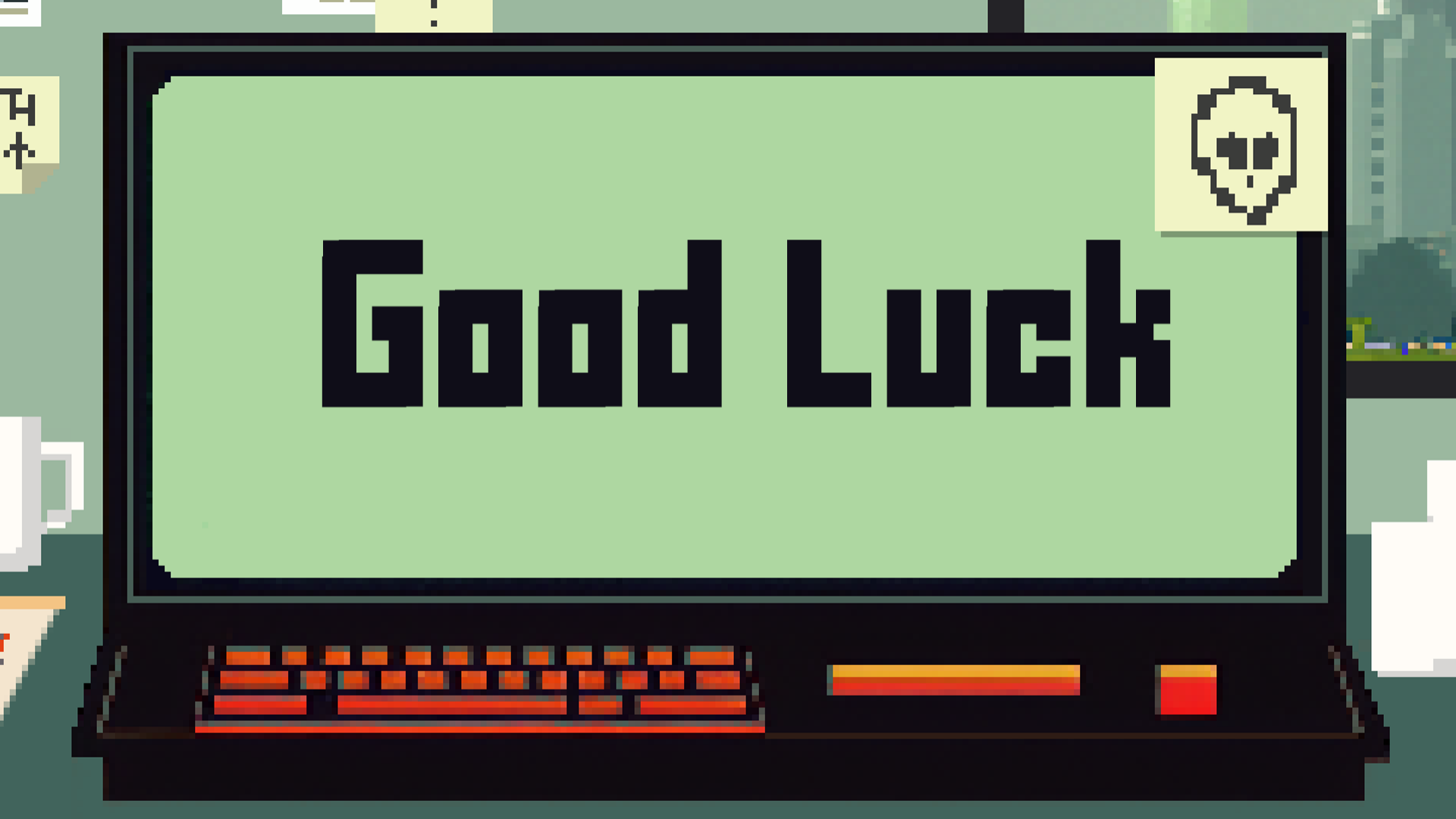


	Input	Output
Format	<p>message</p> <p>N</p> <p>word (line is repeated N times)</p> <p>D A</p> <p>decryptionTableId (block is repeated D times)</p> <p>cipherChar plainChar (line is repeated A times)</p>	<p>decryptionTableId</p>
Types	<p>message (string): a sequence of words separated by spaces</p> <p>N (int): number of words in the dictionary</p> <p>word (String): a word in the alien language</p> <p>D (int): number of decryption tables</p> <p>A (int): number of letters in the alien alphabet (and therefore number of lines in one decryption table)</p> <p>cipherChar (char): the letter in the ciphertext that has to be substituted</p> <p>plainChar (char): the letter that the ciphertext letter has to be substituted with</p>	<p>decryptionTableId (int): id of the correct decryptionTable (starting with 0)</p>



	Input	Output
Example	<p>             DBCB DCCEC ACCCCE DBCB CCEDBCBEA CEDEACC CCEDBCBEA BAC CCCCC CEDEACC              15              BCCAC              BECE              ACBCCAC              ACC              CABADCC              CCABCE              CCABECEAD              CCCCCC              CCCECEAC              CCEB              CDD              DCCC              DCCCCA              EDC              EDCCDE              3 5              0              B C              A E              C A              D B              E D              1              B E              A D              C C              D B              E A              2              B D              A A              C C              D B              E E           </p>	<p>1</p> <p>Explanation: The table with the id 1 (the second table) is the correct one</p>





**Good Luck**

