Problem:

You are trying to send a secret message, and you've decided to encode it by replacing every letter in your message with its corresponding letter in a backwards version of the alphabet. What do your messages look like?

Task: Create a program that replaces each letter in a message with its corresponding letter in a backwards version of the English alphabet.

Input Format: A string of your message in its normal form.

Output Format: A string of your message once you have encoded it (all lower case).

Sample Input: Hello World

Sample Output: svool dliow

Solution:

```
msg = input()
msg = msg.lower()
word_num = {
   "a": 1, "b": 2, "c": 3, "d": 4, "e": 5, "f": 6, "g": 7, "h": 8, "i": 9,
   "j": 10, "k": 11, "l": 12, "m": 13, "n": 14, "o": 15, "p": 16, "q": 17,
   "r": 18, "s": 19, "t": 20, "u": 21, "v": 22, "w": 23, "x": 24, "y": 25, "z": 26
}

num_word = {
   1: "a", 2: "b", 3: "c", 4: "d", 5: "e", 6: "f", 7: "g", 8: "h", 9: "i",
   10: "j", 11: "k", 12: "l", 13: "m", 14: "n", 15: "o", 16: "p", 17: "q",
   18: "r", 19: "s", 20: "t", 21: "u", 22: "v", 23: "w", 24: "x", 25: "y", 26: "z"
}
words = msg.split()
inv_words =[]

for word in words:
   inv_letters = []
   for letter in word:
      val = word_num.get(letter)
      inverse_val = 27-val
```

```
        inv_letter = num_word.get(inverse_val)
        inv_letters.append(inv_letter)

    inv_word = ''.join(inv_letters)
    inv_words.append(inv_word)

inv_msg = ' '.join(inv_words)
print(inv_msg)
```