9/21/23, 1:25 PM Izw

LZW_Dictionary_Encoding

```
In [3]: def lzw_encode_file(input_file, output_file):
    with open(input_file, 'r') as f:
        text = f.read()
    dictionary = {chr(i): i for i in range(256)}
    result = []
    current = ""
    for char in text:
        current += char
        if current not in dictionary:
             dictionary[current] = len(dictionary)
             result.append(dictionary[current[:-1]])
             current = char
    result.append(dictionary[current])
    with open(output_file, 'w') as f:
        f.write(' '.join(map(str, result)))
# Usage
input_file = 'input.txt'
output_file = 'encoded.txt'
lzw_encode_file(input_file, output_file)
```

input.txt: ababbabcababba

encoded.txt: 97 98 256 257 98 99 256 258 97