Encode and Decode Strings

Category	Arrays & Hashing
Difficulty Level	Medium
Neetcode Link	https://neetcode.io/problems/string-encode-and-decode
Status	In progress

Encode and Decode Strings

Design an algorithm to encode a list of strings to a single string. The encoded string is then decoded back to the original list of strings.

Please implement `encode` and `decode`

Example 1:

```
Input: ["neet","code","love","you"]

Output:["neet","code","love","you"]
```

Example 2:

```
Input: ["we","say",":","yes"]

Output: ["we","say",":","yes"]
```

Constraints:

`0 <= strs.length < 1000 <= strs[i].length < 200strs[i]` contains only UTF-8 characters.

- `0 <= strs.length < 100`
- `0 <= strs[i].length < 200`
- `strs[i]` contains only UTF-8 characters.

Intuition:

We can combine the string all together when encoding but we would need some form of *delimiter* so we know how to seperate the string back.

```
input = ["neet", "code", "love", "you"]

encoded_input = ["neet#code#love#you"]

Output = ["neet", "code", "love", "you"]
```

We can't just use a random special character as an delimiter as it has the chance to show up in a string

```
input = ["neet", "co#de"]

encode_input = ["neet#co#de"]

Output = ["neet", "co", "de"]
```

We could use the length of the string + delimiter for encoding, that way decoding would be easier and knows when to start a new string in list.

```
input = ["neet", "co#de"]

encoded_input = ["4:neet5:co#de"]

Output = ["neet", "co#de"]
```