

Ruby - Strings - Encoding

In Ruby, strings are objects of the [String](#) class, which defines a powerful set of operations and methods for manipulating text (e.g., indexing, searching, modifying, etc.). Here are a few easy ways to create Strings:

```
my_string = "Hello." # create a string from a literal
my_empty_string = String.new # create an empty string
my_copied_string = String.new(my_string) # copy a string to a new variable
```

Until Ruby **1.8**, Strings were nothing but a collection of bytes. Data was indexed by byte count, size was in terms of number of bytes, and so on. Since Ruby **1.9**, Strings have additional [encoding](#) information attached to the bytes which provides information on how to interpret them. For example, this code:

```
str = "With ♥!"
print("My String's encoding: ", str.encoding.name)
print("\nMy String's size: ", str.size)
print("\nMy String's bytesize: ", str.bytesize)
```

produces this output:

```
My String's encoding: UTF-8
My String's size: 7
My String's bytesize: 9
```

You can make the following observations about the above code:

- The string literal creates an object which has several accessible methods.
- The string has attached *encoding* information indicating it's an [UTF-8](#) string.
- A String's *size* corresponds to the number of characters we see.
- A String's *bytesize* corresponds to the actual space taken by the characters in memory (the ♥ symbol requires **3** bytes instead of **1**).

Although **UTF-8** is the most popular (and recommended) encoding style for content, Ruby supports **100** other encodings (try `puts Encoding.list` for the full list). With this in mind, we should learn how to convert between different encodings.

Task

In this challenge, we practice setting the encoding information for some string of text using Ruby's [Encoding](#) methods. Write a function named *transcode* which takes a **ISO-8859-1** encoded string as a parameter, converts it to an **UTF-8** encoded string, and returns the result.

Input Format

Our hidden code checker will call your function, passing it an **ISO-8859-1** encoded string as an argument.

Constraints

- Your function must be named *transcode*.

Output Format

Your function must return an **UTF-8** encoded string.