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CIS-110/Program #6

Decode ASCII characters into text(Poem)

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IPO (Input, Process, Output):

Input:

A filename (default "poem.txt"). The file has ASCII space-separated strings, where each string represents an integer.

Process:

Open the file by the filename in read mode.

Read the file.

Split the file into a list of strings, using spaces as delimiters.

Work through each string in the list.

Convert the string to an integer.

Convert the integer to ASCII character.

Print the character without a newline (using end="").

If the string cannot be converted to an integer, print error message showing an invalid number.

If any other unexpected error occurs within the try block, print an error message with the error details.

If the file by the filename not found, print an error message.

Output:

Output printed to the console, forming the decoded "poem."

Error messages printed to the console if there are any with the file or data.

Pseudo Code:

function decode_poem(filename = "poem.txt"):

Try:

Open file named 'filename' in read mode AS file_handle

Read all content from file_handle and split by spaces into list numbers_string_list

For each string num_string in numbers_string_list:

Try:

Convert num_string to integer and store in num

Convert num to character and store in char

Print char without newline

Catch value error:

Print "Invalid number in file: " + num_string

Catch other exception as error:

Print "An unexpected error occurred: " + error

Close file_handle

Catch file not found error:

Print "error: file " + filename + " not found."

Catch other exceptions as error:

Print "An unexpected error occurred: " + error

Call decode_poem()