# Character and Word Sorting in Python

## 1. Sorting by ASCII Characters

text = input("Enter a sentence: ")  
  
cleaned\_text = ""  
for ch in text:  
 if ch.isalnum(): # keep only letters and numbers  
 cleaned\_text = cleaned\_text + ch  
  
sorted\_chars = sorted(cleaned\_text)  
print("Sorted Characters:", sorted\_chars)

Explanation:

- The program takes a sentence from the user.  
- It removes all special characters and spaces using isalnum().  
- Then it sorts all remaining characters based on their ASCII values.  
- Finally, it prints the sorted list of characters.

## 2. Alphabetically Sorting Each Word:

text = input("Enter a sentence: ")  
  
words = text.split()  
new\_words = []  
  
for word in words:  
 clean = ""  
 for ch in word:  
 if ch.isalnum(): # remove special characters  
 clean = clean + ch  
 sorted\_word = "".join(sorted(clean)) # sort letters in each word  
 new\_words.append(sorted\_word)  
  
print("Alphabetically sorted words:", new\_words)

Explanation:

- The sentence is split into words using split().  
- Special characters are removed from each word.  
- Each word’s letters are sorted alphabetically.  
- Finally, it prints all words with their characters sorted.