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Task 4 documentation

### ****Description:****

In this notebook, I performed different small Python programs based on string and number processing.  
It includes checking a card number validity, removing punctuations from a given text, and sorting words and characters of a sentence without using any built-in functions.  
The purpose of this task was to understand logic building, loops, ASCII values, and sorting manually.

### ****Features:****

1. **Card Number Validation:**  
   It checks whether the entered card number is valid or invalid using the Luhn algorithm.
2. **Remove Punctuations:**  
   It removes all special symbols and only keeps alphabets, digits, and spaces using ASCII values.
3. **Sort Words:**  
   It sorts all the words of a sentence alphabetically using bubble sort logic.
4. **Sort Characters:**  
   It sorts all characters of a sentence one by one according to their ASCII values using bubble sort.

### ****Logic Used:****

#### ****1. Card Validation Logic:****

* User enters a card number.
* Converts it into a list of integers.
* Doubles every second digit from the right side.
* If doubled value is greater than 9, subtract 9 from it.
* Add all digits together and check if the total is divisible by 10.
* If yes, card is **VALID**, otherwise **INVALID**.

#### ****2. Remove Punctuations Logic:****

* User enters a text.
* Each character is checked using ASCII values.
* Only alphabets (A–Z, a–z), digits (0–9), and spaces ( ) are added to new string.
* Prints text without punctuation.

#### ****3. Word Sorting Logic:****

* User enters a sentence.
* Sentence is split into a list of words.
* Using nested loops (bubble sort), each word is compared and swapped if needed.
* Finally, it prints sorted words in alphabetical order.

#### ****4. Character Sorting Logic:****

* User enters a sentence.
* Sentence is converted into a list of characters.
* Each character is compared using bubble sort and arranged according to ASCII values.
* The sorted characters are joined back into a string and displayed