Artificial Intelligence and Machine Learning

Project Report

Semester-IV (Batch-2022)

Case Study: - String Methods.

Url:-

https://drive.google.com/file/d/1dLSeKtb1Me9EG0F81F22kJlbzcuC2-NN/view?usp=drive_link

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Description about Case Study: -

- Read the given Technologies Dataset.
- Convert lowercase column , use str.lower()
- Convert lowercase column, use apply()
- Use apply() & lambda function
- Convert pandas column to lowercase , use map()
- Use the str.strip() method.
- Use the str.split() method.
- Use the str.contains() method.
- Use the str.replace() method.
- Use the str.startswith() method
- Use the str.endswith() method
- Use the str.cat() method
- Use the str.get() method
- Use the str.slice() method
- Use the str.find() method.

Library: -

- Pandas

Methods: -

1. **read_csv():**
   Description: Reads a CSV file and converts it into a data frame.

0. **str.lower():**
   Description: This method returns a copy of the string with all its characters converted to lowercase.
0. **map():**
   Description: This is a higher-order function in Python that applies a given function to all items in an iterable (like a list) and returns an iterator that yields the results.
0. **map(lower):**
   Description: This appears to be an incomplete expression. Typically, **map()** is used with a function and an iterable. **lower** might refer to the **str.lower()** method mentioned earlier.
0. **map(upper):**

Description: Similar to the previous point, **map(upper)** seems incomplete. It might be an attempt to map the **str.upper()** method over an iterable.

0. **str.len():**

Description: This is not a method of string objects in Python. Instead, you would use **len()** function to get the length of a string.

0. **str.strip():**
   Description : This method returns a copy of the string with leading and trailing whitespace removed.

0. **str.split():**
   Description: This method splits a string into a list of substrings based on a specified separator.
0. **str.contains():**
   Description: This method is not a built-in method for Python strings. However, it is a method in the pandas library used for string matching operations on Series and Indexes.
0. **str.replace():**
   Description(): This method returns a copy of the string with all occurrences of a specified substring replaced with another substring.
0. **str.startswith():**
   Description: This method returns **True** if the string starts with the specified prefix; otherwise, it returns **False**.
0. **str.endswith():**
   Description: This method returns **True** if the string ends with the specified suffix; otherwise, it returns **False**.
0. **str.cat():**
   Description: This method concatenates strings in a series with a given separator.
0. **str.get():**
   Description: This method is not a standard method for Python strings. However, it might refer to the **.get()** method used with dictionaries to retrieve a value for a given key.
0. **str.slice():**
   Description: This is not a method for Python strings. Instead, you would typically use slicing syntax like **str[start:end]** to extract a portion of the string.
0. **str.find():**
   Description: This method returns the lowest index in the string where the specified substring is found. If the substring is not found, it returns -1.